

Sample: SRR17276215

FASTQ Quality

Filename	SRR17276215_R1.fastq.gz	SRR17276215_R2.fastq.gz
File Size	249.8 MB	335.8 MB
Q30 Passing	91.95%	69%
Mean Read Score	30.1	19.7
Average Read Length	249.3	249.3

Read Mapping against SRR17276215

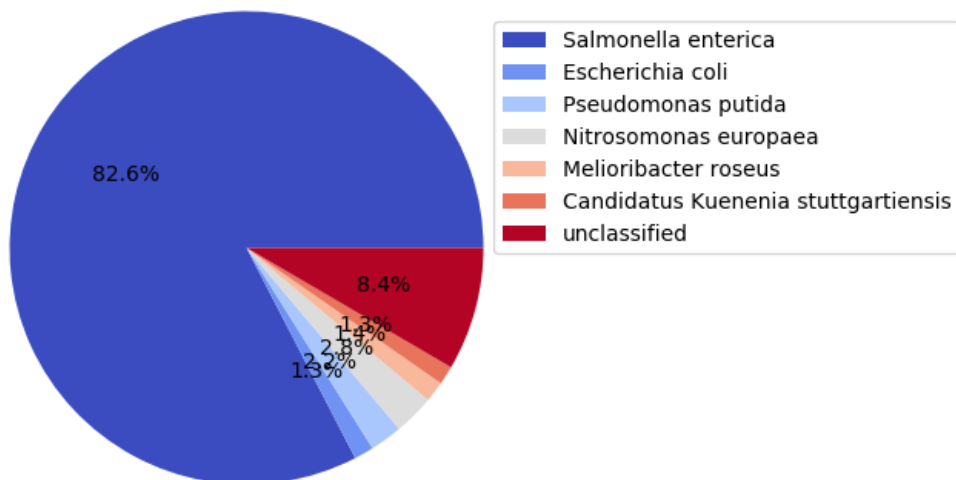
Mapped Paired Reads	Mapped Single Reads	Unmapped Reads	Unmapped Percent	Unmapped Assembled Contigs	
1,524,964	8,333	236,603	13.4%	assembly not done	
Duplicate Paired Reads	Duplicate Single Reads	Duplicate Percent of Mapped Reads			
227,528	5,243	15.1%			
BAM File	Reference Length	Genome with Coverage	Average Depth	No Coverage Bases	Quality SNPs
SRR17276215_nodup.bam	5,766,508	98.84%	112.9X	66,628	815

Assembly

Contig count	Contig length counts < 301-999bp >	Longest contig	Total length	N50	FASTQ calculated mean coverage
1,811	427 1,328 56	582,171	5,766,508	224,122	142.4X

FASTQ Identifications

FASTQ Read Identification



Identified using: Kraken and Bracken

Genome Size Comparisons

Salmonella enterica	expected: 5,050,000 nt
SRR17276215	assembled: 5,766,508 nt

Sourmash Sequence Similarity

Similarity	ID
88.4%	LHOM01000001.1 Salmonella enterica subsp. enterica serovar 4,12:i:- strain CVM N51306 N51306_contig_1, whole genome shotgun sequence
88.0%	LN999997.1 Salmonella enterica subsp. enterica serovar Typhimurium isolate SO4698-09 genome assembly, chromosome: I
87.8%	LHMA01000001.1 Salmonella enterica subsp. enterica serovar 4,5,12:i:- strain CVM N50445 N50445_contig_1, whole genome shotgun sequence
87.8%	MYJB01000100.1 Salmonella enterica strain BCW_5839 NODE_100_length_324_cov_0.396624, whole genome shotgun sequence
87.7%	JYZR01000001.1 Salmonella enterica subsp. enterica serovar Typhimurium strain CVM N42467 N42467_contig_1, whole genome shotgun sequence
87.7%	LHMF01000001.1 Salmonella enterica subsp. enterica serovar 4,5,12:i:- strain CVM N51240 N51240_contig_1, whole genome shotgun sequence
87.6%	LJJK01000001.1 Salmonella enterica subsp. enterica serovar 4,12:i:- strain STM3910 contig00001, whole genome shotgun sequence
87.5%	LHKM01000001.1 Salmonella enterica subsp. enterica serovar 4,12:i:- strain CVM N48691 N48691_contig_1, whole genome shotgun sequence
87.5%	MYIZ01000100.1 Salmonella enterica strain BCW_5841 NODE_100_length_1075_cov_9.32731, whole genome shotgun sequence
87.5%	JRGT01000001.1 Salmonella enterica subsp. enterica serovar Typhimurium strain S23 contig_1, whole genome shotgun sequence

MLST 2.19.0

Schema-Sequence type: **senterica-34**

MLST Detail: aroC(10), dnaN(19), hemD(12), hisD(9), purE(5), sucA(9), thrA(2)

Results provided by: MLST

AMRFinderPlus - version 3.11.2, database 2021-03-01.1

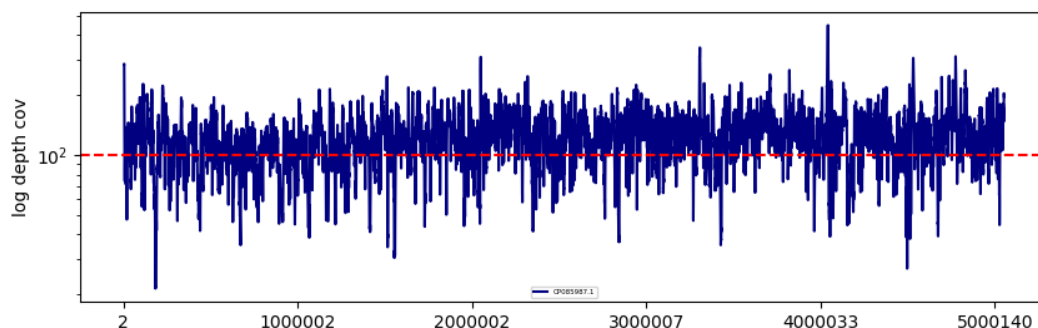
AMRFinderPlus Organism Option: Salmonella

Contig ID	Element	Gene	Description	% Cov	% Similar
NODE_11_length_178026_cov_77.010888	VIRULENCE	sinH	intimin-like inverse autotransporter SinH	100.0%	100.0%
NODE_1354_length_430_cov_1.283828	METAL	merR	mercury resistance transcriptional regulator MerR	78.47%	94.69%
NODE_13_length_148609_cov_64.668640	AMR	mdsB	multidrug efflux RND transporter permease subunit MdsB	100.0%	100.0%
NODE_13_length_148609_cov_64.668640	AMR	mdsA	multidrug efflux RND transporter periplasmic adaptor subunit MdsA	100.0%	100.0%
NODE_13_length_148609_cov_64.668640	METAL	golT	gold/copper-translocating P-type ATPase GolT	100.0%	100.0%
NODE_13_length_148609_cov_64.668640	METAL	golS	Au(I) sensor transcriptional regulator GolS	100.0%	100.0%
NODE_2_length_426605_cov_64.254923	VIRULENCE	iroC	salmochelin/enterobactin export ABC transporter IroC	98.85%	80.0%
NODE_2_length_426605_cov_64.254923	VIRULENCE	iroB	salmochelin biosynthesis C-glycosyltransferase IroB	100.0%	86.52%
NODE_33_length_12022_cov_25.511728	AMR	tet(B)	tetracycline efflux MFS transporter Tet(B)	100.0%	100.0%
NODE_34_length_10357_cov_66.273998	VIRULENCE	sodC1	superoxide dismutase [Cu-Zn] SodC1	100.0%	100.0%
NODE_35_length_9303_cov_541.762533	AMR	qnrB19	quinolone resistance pentapeptide repeat protein QnrB19	100.0%	100.0%
NODE_37_length_6337_cov_197.662480	METAL	merC	organomercurial transporter MerC	100.0%	100.0%
NODE_37_length_6337_cov_197.662480	METAL	merP	mercury resistance system periplasmic binding protein MerP	100.0%	90.11%
NODE_37_length_6337_cov_197.662480	METAL	merT	mercuric transport protein MerT	100.0%	100.0%
NODE_37_length_6337_cov_197.662480	METAL	merR	mercury resistance transcriptional regulator MerR	100.0%	93.75%
NODE_41_length_4638_cov_109.960763	AMR	sul2	sulfonamide-resistant dihydropteroate synthase Sul2	100.0%	100.0%
NODE_41_length_4638_cov_109.960763	AMR	aph(3')-Ib	aminoglycoside O-phosphotransferase APH(3')-Ib	100.0%	100.0%
NODE_41_length_4638_cov_109.960763	AMR	aph(6)-Id	aminoglycoside O-phosphotransferase APH(6)-Id	100.0%	100.0%
NODE_47_length_2168_cov_46.195982	AMR	blaTEM-1	broad-spectrum class A beta-lactamase TEM-1	100.0%	100.0%
NODE_5_length_321150_cov_66.056856	METAL	arsR	As(III)-sensing metalloregulatory transcriptional repressor ArsR	100.0%	94.87%
NODE_5_length_321150_cov_66.056856	METAL	arsD	arsenite efflux transporter metallochaperone ArsD	100.0%	92.5%
NODE_5_length_321150_cov_66.056856	METAL	arsA	arsenite efflux transporter ATPase subunit ArsA	100.0%	95.88%
NODE_5_length_321150_cov_66.056856	METAL	arsB	arsenite efflux transporter membrane subunit ArsB	100.0%	98.37%
NODE_5_length_321150_cov_66.056856	METAL	arsC	glutaredoxin-dependent arsenate reductase	100.0%	97.87%
NODE_5_length_321150_cov_66.056856	METAL	silE	silver-binding protein SilE	100.0%	90.91%
NODE_5_length_321150_cov_66.056856	METAL	silS	copper/silver sensor histidine kinase SilS	99.8%	97.55%
NODE_5_length_321150_cov_66.056856	METAL	silR	copper/silver response regulator transcription factor SilR	100.0%	97.35%
NODE_5_length_321150_cov_66.056856	METAL	silC	Cu(+)/Ag(+) efflux RND transporter outer membrane channel SilC	100.0%	98.05%
NODE_5_length_321150_cov_66.056856	METAL	silF	Cu(+)/Ag(+) efflux RND transporter periplasmic metallochaperone SilF	100.0%	97.44%
NODE_5_length_321150_cov_66.056856	METAL	silB	Cu(+)/Ag(+) efflux RND transporter periplasmic adaptor subunit SilB	100.0%	96.74%
NODE_5_length_321150_cov_66.056856	METAL	silA	Cu(+)/Ag(+) efflux RND transporter permease subunit SilA	100.0%	97.14%
NODE_5_length_321150_cov_66.056856	METAL	silP	Ag(+)-translocating P-type ATPase SilP	99.64%	95.14%
NODE_5_length_321150_cov_66.056856	METAL	pcoA	multicopper oxidase PcoA	100.0%	99.01%
NODE_5_length_321150_cov_66.056856	METAL	pcoC	copper resistance system metallochaperone PcoC	100.0%	99.21%
NODE_5_length_321150_cov_66.056856	METAL	pcoD	copper resistance inner membrane protein PcoD	100.0%	98.71%
NODE_5_length_321150_cov_66.056856	METAL	pcoR	copper response regulator transcription factor PcoR	100.0%	99.56%
NODE_5_length_321150_cov_66.056856	METAL	pcoS	copper resistance membrane spanning protein PcoS	99.57%	96.55%

Results provided by: AMRFinderPlus

Coverage Graph

SRR17276215 reads aligned against CP085987



ID	Average Depth	Genome Coverage	Genome Length	Ambiguous SNPs
CP085987.1	124.1X	100.0%	5,052,615	12

ID Detail

CP085987.1 *Salmonella enterica* strain SZL 38 chromosome, complete genome

SeqSero2 Detail

Predicted serotype(s)	Typhimurium
Predicted antigenic profile	4:i:1,2
Predicted subspecies	<i>Salmonella enterica</i> subspecies <i>enterica</i> (subspecies I)

Note: Detected a deletion in gene *oafA* that causes O5- variant of Typhimurium.

Header	Antigen	Blast Score	Identity
NODE_3_length_1780_cov_17.388385	O-4_wzx	2383.3	99.92%
NODE_2_length_2022_cov_98.122955	fljB 1,2	2804.33	99.93%
NODE_4_length_1421_cov_72.488408	fliC i	2154.31	78.49%

Results provided by: SeqSero2

Sistr

Serovar

Sistr ran but not completed

PlasmidFinder Detail

Plasmid	Description	Length	Contig ID	HSP Length	% Identity	% Coverage
p0111	AP010962.1 <i>Escherichia coli</i> O111:H- str. 11128 pla	97,897	NODE_20_length_78817_cov_57.689732	885	98.64%	100.0%
Col(pHAD28)	KU674895.1 <i>Salmonella enterica</i> subsp. <i>enterica</i> ser	2,617	NODE_35_length_9303_cov_541.762533	131	93.13%	100.0%
Col440I	CP023920.1 <i>Klebsiella pneumoniae</i> strain FDAARGOS_4	4,619	NODE_35_length_9303_cov_541.762533	114	95.61%	100.0%
IncQ1	M28829.1 <i>Escherichia coli</i> plasmid RSF1010, complet	8,684	NODE_41_length_4638_cov_109.960763	529	100.0%	66.46%

Results provided by: PlasmidFinder

BLAST nt - Assembly Identification

Nucleotide Representa- tion	Description
3,775,023	CP085987 <i>Salmonella enterica</i> strain SZL 38 chromosome, complete genome
342,610	CP117033 <i>Salmonella enterica</i> strain PIW95_S14_0299 chromosome, complete genome
282,782	CP110657 <i>Salmonella enterica</i> subsp. <i>enterica</i> strain S2122 chromosome, complete genome
205,179	CP050753 <i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Typhimurium strain ST45 chromosome, complete ge
90,710	CP037879 <i>Salmonella enterica</i> subsp. <i>enterica</i> serovar 4,[5],12:i:- strain PNCS014863 chromosome, comp
84,747	CP037882 <i>Salmonella enterica</i> subsp. <i>enterica</i> serovar 4,[5],12:i:- strain PNCS014875 chromosome, comp
78,817	CP085986 <i>Salmonella enterica</i> strain SZL 38 plasmid pSZL38.1, complete sequence
69,185	CP050731 <i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Typhimurium strain ST101 chromosome, complete g
45,833	CP050726 <i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Typhimurium strain ST113 chromosome, complete g
41,746	CP050728 <i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Typhimurium strain ST106 chromosome, complete g
26,252	CP051276 <i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Typhimurium strain OLF-FSR1_WB_Sparrow_ST-87
13,283	AL954747 <i>Nitrosomonas europaea</i> ATCC 19718, complete genome
12,300	CP054389 <i>Nitrosomonas</i> sp. H1_AOB3 chromosome
10,171	MG803207 Uncultured bacterium clone 2a_81675 16S ribosomal RNA gene, partial sequence
9,488	CP069300 <i>Bradyrhizobium</i> sp. PSBB068 chromosome, complete genome
9,303	CP056965 <i>Escherichia fergusonii</i> strain RHB41-C20 plasmid pRHB41-C20_5, complete sequence
9,287	CP055130 <i>Salmonella enterica</i> strain FDAARGOS_711 chromosome
7,505	CP053865 <i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Typhimurium strain SL7207 chromosome, complete
7,102	LR647059 uncultured bacterium partial 16S rRNA gene
6,946	CP072801 <i>Thiothrix litoralis</i> strain AS chromosome, complete genome
5,813	LR637496 uncultured bacterium partial 16S rRNA gene
5,669	CP058703 MAG: Cyclobacteriaceae bacterium isolate SSA6 chromosome
4,638	AP023238 <i>Escherichia coli</i> F070 plasmid pF070-NDM5 DNA, complete genome
3,672	AP024277 <i>Streptococcus parasuis</i> SUT-380 DNA, complete genome
3,597	CP053482 <i>Thiothrix subterranea</i> strain Ku-5 chromosome, complete genome
3,226	AP020330 <i>Salmonella enterica</i> SEHaa3795 DNA, complete genome
3,152	CP091278 MAG: <i>Candidatus Jettenia</i> sp. isolate AM49 chromosome, complete genome
2,851	CP068015 <i>Klebsiella pneumoniae</i> strain 2016_49 chromosome, complete genome
2,849	CP054181 <i>Ignavibacteria</i> bacterium isolate H1_BAC2 chromosome
2,608	CP003734 <i>Pseudomonas putida</i> DOT-T1E, complete genome
2,488	MK981118 Uncultured beta proteobacterium clone read61340 16S ribosomal RNA gene, partial sequence
2,364	CP052818 <i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Infantis strain CVM N17S1509 plasmid pN17S1509,
2,249	NC_054922 <i>Escherichia</i> phage vB_EcoM_KAW1E185, complete genome
2,168	CP054215 <i>Escherichia coli</i> strain EcPF40 plasmid p1, complete sequence
2,016	LN534671 Uncultured bacterium partial 16S rRNA gene, isolate Mineral.top.1.6.1.4_132216
1,945	CP049986 <i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Saintpaul strain CVM N16S133 chromosome, comple
1,910	CP050750 <i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Typhimurium strain ST46 chromosome, complete ge
1,789	LC663122 <i>Epsilonproteobacteria</i> bacterium ARSSAG-00002389 DNA, putative prophage region, clone: 00002
1,753	CP052817 <i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Infantis strain CVM N17S1509 chromosome, comple
1,731	MH918088 Uncultured bacterium clone 9 16S ribosomal RNA gene, partial sequence
1,731	CP035917 <i>Salmonella enterica</i> strain S44712 chromosome, complete genome
1,716	CP054237 <i>Escherichia coli</i> strain EcPF5 plasmid p1, complete sequence
1,671	MH918087 Uncultured bacterium clone 8 16S ribosomal RNA gene, partial sequence
1,504	MG804865 Uncultured bacterium clone 3b_16119 16S ribosomal RNA gene, partial sequence
1,435	CP058708 MAG: <i>Candidatus Accumulibacter cognatus</i> isolate SSA1 chromosome
1,426	CP094685 MAG: <i>Candidatus Thiothrix sulfatfontis</i> isolate KT chromosome, complete genome
1,388	CP091244 <i>Thiothrix winogradskyi</i> strain CT3 chromosome, complete genome
1,388	CP054188 MAG: <i>Planctomycetia</i> bacterium isolate H1_AMX1 chromosome, complete genome
1,352	MK972234 Uncultured bacterium clone CB0124_73 16S ribosomal RNA gene, partial sequence
1,338	LR652235 uncultured bacterium partial 16S rRNA gene
1,278	MN396240 <i>Nitrosomonas europaea</i> strain SH-3 16S ribosomal RNA gene, partial sequence
1,274	KT950792 Uncultured bacterium clone BAC-HSSFCW-P25 16S ribosomal RNA gene, partial sequence
1,222	CP051286 <i>Salmonella enterica</i> subsp. <i>enterica</i> serovar Typhimurium strain OLF-FSR1_WB_Gull_ST-29 ch
1,195	KM410897 Uncultured prokaryote clone PC08-66-60 16S ribosomal RNA gene, partial sequence

Results provided by: BLAST nt database

BLAST nt - Assembly Identification - continued

Nucleotide Representa- tion	Description
1,167	MK981132 Uncultured beta proteobacterium clone read61710 16S ribosomal RNA gene, partial sequence
1,163	CP013720 Salmonella enterica subsp. enterica serovar Typhimurium strain RM10607 chromosome, complete
1,120	CP065007 Candidatus Competibacteraceae bacterium isolate Lyne_18-Q3-R50-59_BATAC.383_cln chromoso
1,028	LC663124 Bacterium ARSSAG-00002529 DNA, putative prophage region, clone: 00002529_pp1
1,011	LN534633 Uncultured bacterium partial 16S rRNA gene, isolate Mineral.top.1.6.1.4_130003
983	FP929003 Candidatus Nitrospira defluvii chromosome, complete genome
974	CP053377 Bacillus velezensis strain EN01 chromosome, complete genome
962	CP041361 Bacillus velezensis strain WRN014 chromosome, complete genome
950	LC663039 Bacterium ARSSAG-00002381 DNA, putative prophage region, clone: 00002381_pp2
949	CP001281 Thauera sp. MZ1T, complete genome
945	CP072748 Thiothrix fructosivorans strain ATCC 49748 chromosome, complete genome
943	MK981131 Uncultured beta proteobacterium clone read61654 16S ribosomal RNA gene, partial sequence
938	CP100569 Gallus gallus breed Huxu chromosome 15
938	JN391737 Uncultured bacterium clone Q7531-HYBA 16S ribosomal RNA gene, partial sequence
938	CP029473 Bacillus velezensis strain Hx05 chromosome, complete genome
936	CP034522 Eukaryotic synthetic construct chromosome 19
932	GQ183163 Uncultured bacterium clone 1.01 16S ribosomal RNA gene, partial sequence
925	MF967715 Uncultured bacterium clone OTU110_DOL2.71720 16S ribosomal RNA gene, partial sequence
909	LR639445 uncultured bacterium partial 16S rRNA gene
908	MW063138 MAG: CrAssphage cat_SB2894, partial genome
904	BK017404 MAG TPA_asm: Caudoviricetes sp. isolate ctWw09, partial genome
896	LT844191 Uncultured bacterium partial 16S rRNA gene, isolate BACT_OTU_2655
894	LT844198 Uncultured bacterium partial 16S rRNA gene, isolate BACT_OTU_2727
894	MF439926 Uncultured bacterium clone cafs761 16S ribosomal RNA gene, partial sequence
891	FJ933395 Uncultured Clostridia bacterium clone REV_R1P1_8F 16S ribosomal RNA gene, partial sequenc
889	KC127916 Uncultured bacterium clone GW446NO02HT6ZQ 16S ribosomal RNA gene, partial sequence
885	CP054232 Escherichia coli strain EcPF7 chromosome, complete genome
821	OX421324 Diaphora mendica genome assembly, chromosome: 14
772	MH890329 Uncultured bacterium clone OTU1210_RD_1.9111 16S ribosomal RNA gene, partial sequence
758	FJ710733 Uncultured bacterium clone Dok14 16S ribosomal RNA gene, partial sequence
749	MK972232 Uncultured bacterium clone CB0413_76 16S ribosomal RNA gene, partial sequence
741	LR640918 uncultured bacterium partial 16S rRNA gene
703	MF970180 Uncultured bacterium clone OTU898_L1.34669 16S ribosomal RNA gene, partial sequence
677	MK472011 Uncultured prokaryote clone A623 16S ribosomal RNA gene, partial sequence
672	MW084337 Uncultured bacterium clone Otu2441 16S ribosomal RNA gene, partial sequence
666	KP292318 Uncultured bacterium clone JRH288 16S ribosomal RNA gene, partial sequence
649	KJ831783 Uncultured bacterium clone ABRQ23 16S ribosomal RNA gene, complete sequence
637	KX851992 Uncultured bacterium clone IPAS9 16S ribosomal RNA gene, partial sequence
634	LR743504 Methylobacterium bullatum isolate mbul1 genome assembly, chromosome: 1
603	AB608064 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: PVAan-10
596	LR639779 uncultured bacterium partial 16S rRNA gene
585	JQ809242 Uncultured bacterium clone ASNR-15 16S ribosomal RNA gene, partial sequence
584	LT843587 Uncultured bacterium partial 16S rRNA gene, isolate BACT_OTU_2758
583	LC211677 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: E551
580	LR637533 uncultured bacterium partial 16S rRNA gene
578	KY355503 Uncultured eukaryote clone QCBV2ZB101 18S ribosomal RNA gene, partial sequence
578	KC551723 Uncultured bacterium clone BJ 2-67 16S ribosomal RNA gene, partial sequence
577	KJ831785 Uncultured bacterium clone ABRQ27 16S ribosomal RNA gene, complete sequence
573	JQ809248 Uncultured bacterium clone ASNR-30 16S ribosomal RNA gene, partial sequence
573	AB695463 Uncultured eukaryote gene for 18S ribosomal RNA, complete sequence, clone: MPE1-20
571	CP076677 Rhodopseudomonas palustris strain PP803 chromosome, complete genome
564	MZ912683 Dendrosoma radians isolate MMZ2017021401 small subunit ribosomal RNA gene, partial sequence
562	CP100577 Gallus gallus breed Huxu chromosome 23
556	KJ807968 Uncultured bacterium clone B47 16S ribosomal RNA gene, partial sequence

Results provided by: BLAST nt database

BLAST nt - Assembly Identification - continued

Nucleotide Representa- tion	Description
536	CP061294 Polynucleobacter sp. MWH-Spelu-300-X4 chromosome, complete genome
530	KY355511 Uncultured eukaryote clone QCBT1ZD031 18S ribosomal RNA gene, partial sequence
529	KP391876 Uncultured bacterium clone MISEQ01_89_000000000-A647M_1_2118_18065_16613 16S ribosoma
521	OW011623 Thauera sp. PIV-1 strain Piv1 genome assembly, chromosome: C4PIVTH
520	CP044543 Bradyrhizobium betae strain PL7HG1 chromosome, complete genome
519	LR638006 uncultured bacterium partial 16S rRNA gene
515	CP059265 Candidatus Thiothrix singaporensis isolate SSD2 chromosome, complete genome
510	MG801262 Uncultured bacterium clone 2d_38584 16S ribosomal RNA gene, partial sequence
510	GQ183192 Uncultured Chloroflexus sp. clone 1.56 16S ribosomal RNA gene, partial sequence
508	LC662966 Saccharospirillaceae bacterium ARSSAG-00001368 DNA, putative prophage region, clone: 000013
505	CP026692 Nostoc sp. 'Lobaria pulmonaria (5183) cyanobiont' strain 5183 chromosome, complete genome
505	CP002902 Alicyclobacillus acidocaldarius subsp. acidocaldarius Tc-4-1, complete genome
505	CP027400 Streptobacillus moniliformis strain FDAARGOS_310 chromosome, complete genome
505	CP061875 Alternaria alternata strain Z7 chromosome 1, complete sequence
503	CP051205 Chitinophaga oryzae strain 1310 chromosome, complete genome
502	LN575721 Uncultured eukaryote partial 18S rRNA gene, clone SIGF1318_N11D1_18S_E
502	CP100581 Gallus gallus breed Huxu chromosome 27
501	LN835299 Plasmodium relictum strain SGS1 genome assembly, chromosome: 4
501	CP051684 Duganella dendranthematis strain AF9R3 chromosome, complete genome
500	AP024636 Arthrobacter sp. NtRootA9 DNA, complete genome
498	LC403698 Uncultured prokaryote 16S_OTU:445 gene for 16S rRNA, partial sequence
496	OK584280 Lacustera cypriaca strain KRAL1 small subunit ribosomal RNA gene, partial sequence
495	KX029804 Uncultured archaeon clone A_OTU_328 16S ribosomal RNA gene, partial sequence
495	CP050765 Salmonella enterica subsp. enterica serovar Indiana strain SI111 plasmid pSI111-1, complete
492	CP064984 Sphingobacteriales bacterium isolate Fred_18-Q3-R57-64_BATAC.414 chromosome
490	LC091364 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: DL-e7
490	CP075192 Ferribacterium limneticum strain 132 chromosome, complete genome
488	CP013200 Arthrobacter alpinus strain ERGS4:06, complete genome
488	CP100560 Gallus gallus breed Huxu chromosome 6
486	CP048775 Salmonella enterica subsp. enterica serovar Agona strain SG17-135 chromosome, complete geno
484	CP100591 Gallus gallus breed Huxu chromosome 37
482	CP007161 Virgibacillus sp. SK37, complete genome
478	NR_148598 Thermostilla marina strain SVX8 16S ribosomal RNA, partial sequence
478	AF445708 Uncultured spirochete clone SM2A10 16S ribosomal RNA gene, partial sequence
478	AF002788 Homo sapiens genomic DNA, chromosome 11q, clone:RP11-347E10, complete sequence
477	MP048658 Uncultured bacterium clone A2076 16S ribosomal RNA gene, partial sequence
476	CP051011 Bacillus velezensis strain BY6 chromosome, complete genome
476	LN594739 Cyprinus carpio genome assembly common carp genome ,scaffold 000002509
475	CP100558 Gallus gallus breed Huxu chromosome 4
474	LR637195 uncultured bacterium partial 16S rRNA gene
474	LR647642 uncultured bacterium partial 16S rRNA gene
474	MN156655 Uncultured bacterium clone A100 16S ribosomal RNA gene, partial sequence
474	CP089304 Pseudomonas sp. NIBR-H-19 chromosome, complete genome
474	CP055160 Bacillus velezensis strain WLYS23 chromosome, complete genome
473	HQ640629 Uncultured bacterium clone B173 16S ribosomal RNA gene, partial sequence
473	KC853040 Uncultured bacterium clone DHT1 16S ribosomal RNA gene, partial sequence
473	MN097028 Uncultured Clavaria clone OTU195 small subunit ribosomal RNA gene, partial sequence
473	OX276484 Acronicta psi genome assembly, chromosome: 16
473	AC073335 Homo sapiens BAC clone RP11-458F8 from 7, complete sequence
473	MT798517 Uncultured bacterium clone swampBacterialClone281 16S ribosomal RNA gene, partial sequence
473	AB488372 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: TSSUR003_M19
473	CP059258 MAG: Anaerolineae bacterium isolate SSC4 chromosome
472	JF989889 Uncultured proteobacterium clone Paddy_500_9190 16S ribosomal RNA gene, partial sequence
472	MH462758 Uncultured bacterium clone OTU1714 16S ribosomal RNA gene, partial sequence

Results provided by: BLAST nt database

BLAST nt - Assembly Identification - continued

Nucleotide Representa- tion	Description
472	EF613846 Uncultured bacterium clone GD27 16S ribosomal RNA gene, partial sequence
472	LT843368 Uncultured bacterium partial 16S rRNA gene, isolate BACT_OTU_2454
472	LR638506 uncultured bacterium partial 16S rRNA gene
472	EF508016 Uncultured bacterium clone FRC-A2_741 16S ribosomal RNA gene, partial sequence
472	LT843409 Uncultured Acinetobacter sp. partial 16S rRNA gene, isolate BACT_OTU_403
472	KC470966 Uncultured bacterium clone N_58 16S ribosomal RNA gene, partial sequence
472	KU324307 Uncultured bacterium clone HYIII45_Bac16s_AQDS10_C07 16S ribosomal RNA gene, partial seq
472	KF799198 Uncultured bacterium clone Woods-Hole_a5759 16S ribosomal RNA gene, partial sequence
472	EU857877 Uncultured bacterium clone A2-49 16S ribosomal RNA gene, partial sequence
472	MH002308 Uncultured bacterium clone 532994 16S ribosomal RNA gene, partial sequence
471	OM181535 Uncultured Bacillus sp. clone OTU_21 16S ribosomal RNA gene, partial sequence
471	JX223360 Uncultured bacterium clone EMIRGE_OTU_s5t4a_554 16S ribosomal RNA gene, partial sequence
471	GU290107 Uncultured eukaryote clone TKR07M.100 18S ribosomal RNA gene, partial sequence
471	EU043561 Uncultured bacterium clone GASP-0KA-484-D01 16S ribosomal RNA gene, partial sequence
471	LR634440 uncultured bacterium partial 16S rRNA gene
471	LR637340 uncultured bacterium partial 16S rRNA gene
471	OM181560 Uncultured Pseudomonas sp. clone OTU_46 16S ribosomal RNA gene, partial sequence
471	KC110488 Uncultured bacterium clone CW2_P1_7G 16S ribosomal RNA gene, partial sequence
471	AB205675 Uncultured bacterium gene for 16S rRNA, partial sequence, clone:13C-A30
471	LT625825 Uncultured Acidobacteria bacterium partial 16S rRNA gene, isolate OTU 894
471	GQ183137 Uncultured delta proteobacterium clone 1.05 16S ribosomal RNA gene, partial sequence
471	JN592665 Uncultured bacterium clone GN40507a09 16S ribosomal RNA gene, partial sequence
471	KM137286 Uncultured bacterium clone LNH_12_1_11_Pumice.235564 16S ribosomal RNA gene, partial se
471	AJ240984 uncultured delta proteobacterium Sva1041 16S rRNA gene, partial
471	HM356891 Uncultured bacterium clone 8619R_plate2b08 16S ribosomal RNA gene, partial sequence
471	KX097482 Uncultured bacterium clone T3-1_43 16S ribosomal RNA gene, partial sequence
471	AB928646 Uncultured bacterium gene for 16S rRNA, partial sequence, clone: 1-29-2-0-1
471	CP090029 Pseudomonas sivasensis strain BsEB-1 chromosome, complete genome
471	HQ910733 Uncultured bacterium clone BL_100 16S ribosomal RNA gene, partial sequence
471	MF970054 Uncultured bacterium clone OTU766_K1.7689 16S ribosomal RNA gene, partial sequence
471	KT283065 Uncultured bacterium clone OP8 16S ribosomal RNA gene, partial sequence
471	KY241509 Uncultured bacterium clone MOC-3-842 16S ribosomal RNA gene, partial sequence
471	JN977387 Uncultured bacterium clone B5-088 16S ribosomal RNA gene, partial sequence
471	KX253957 Chaetoceros cf. socialis strain UNC1406 18S ribosomal RNA gene, partial sequence
471	KP143853 Uncultured bacterium clone E1_R1_043 16S ribosomal RNA gene, partial sequence
471	KF624499 Uncultured bacterium clone JSC_139 16S ribosomal RNA gene, partial sequence
471	KM410894 Uncultured prokaryote clone PC08-66-57 16S ribosomal RNA gene, partial sequence
471	KX355750 Weizmannia coagulans strain LBSC 16S ribosomal RNA gene, partial sequence
471	DQ296469 Uncultured bacterium clone AR-29 16S ribosomal RNA gene, partial sequence
471	HM243849 Uncultured bacterium clone HWB2224-2-91 16S ribosomal RNA gene, complete sequence
471	MN157119 Uncultured bacterium clone A564 16S ribosomal RNA gene, partial sequence
471	KC551539 Uncultured bacterium clone GD 1-8 16S ribosomal RNA gene, partial sequence
471	LR647711 uncultured bacterium partial 16S rRNA gene
471	LT842197 Uncultured Zoogloea sp. partial 16S rRNA gene, isolate BACT_OTU_2555
471	JN981904 Uncultured bacterium clone OTU_6_PBA 16S ribosomal RNA gene, partial sequence
471	MH525590 Uncultured bacterium clone OTU_1942 16S ribosomal RNA gene, partial sequence
471	FJ710722 Uncultured bacterium clone Dok03 16S ribosomal RNA gene, partial sequence
471	KY519727 Uncultured bacterium clone ELA_111314_OTU_4412 16S ribosomal RNA gene, partial sequence
471	LR640315 uncultured bacterium partial 16S rRNA gene
471	LR640774 uncultured bacterium partial 16S rRNA gene
471	JX875891 Uncultured bacterium clone PAE-29 16S ribosomal RNA gene, partial sequence
471	HQ681992 Uncultured bacterium clone ZBAF1-115 16S ribosomal RNA gene, partial sequence
471	JQ768752 Uncultured bacterium clone 7-1 16S ribosomal RNA gene, partial sequence
471	MF691975 Uncultured bacterium clone OTU4012 16S ribosomal RNA gene, partial sequence

Results provided by: BLAST nt database

BLAST nt - Assembly Identification - continued

Nucleotide Representa- tion	Description
470	KC238419 Uncultured bacterium clone PAE-EN23_24 16S ribosomal RNA gene, partial sequence
470	MK972230 Uncultured bacterium clone CB0413_22 16S ribosomal RNA gene, partial sequence
470	LR636311 uncultured bacterium partial 16S rRNA gene
470	LT625177 Uncultured Nitrosomonas sp. partial 16S rRNA gene, isolate OTU 290
470	FJ933275 Uncultured Prosthecobacter sp. clone REG_R2P1_H10 16S ribosomal RNA gene, partial sequenc
470	KC605601 Uncultured bacterium clone CarbonSeq04b_030410_G10 16S ribosomal RNA gene, partial sequen
470	KT835626 Uncultured bacterium isolate DGGE gel band RB3-49 16S ribosomal RNA gene, partial sequence
470	MW083576 Uncultured bacterium clone Otu0907 16S ribosomal RNA gene, partial sequence
470	HG380590 Uncultured bacterium partial 16S rRNA gene, clone HAD84
470	MW510020 Opitutaceae bacterium strain GP5 16S ribosomal RNA gene, partial sequence
470	LC091354 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: SW-h11
470	MH930483 Uncultured bacterium clone OTU 32 16S ribosomal RNA gene, partial sequence
470	KT167051 Uncultured bacterium clone POMEbac75 16S ribosomal RNA gene, partial sequence
470	LR652552 uncultured bacterium partial 16S rRNA gene
470	LN567923 Uncultured bacterium partial 16S rRNA gene, clone SIFA799_N12D4_16S_B
470	EU08325 Uncultured bacterium clone Fin_CL-030724_OTU-21 16S ribosomal RNA gene, partial sequence
470	LR636844 uncultured bacterium partial 16S rRNA gene
470	LN518605 Uncultured bacterium partial 16S rRNA gene, isolate Mineral.btm.1.4.1.2_205974
470	MG803571 Uncultured bacterium clone 3b_6108 16S ribosomal RNA gene, partial sequence
470	LR636331 uncultured bacterium partial 16S rRNA gene
470	LR643132 uncultured bacterium partial 16S rRNA gene
470	MK418879 Castellaniella sp. strain 16S_DB70 16S ribosomal RNA gene, partial sequence
470	AF371493 Uncultured bacterium clone p-3000-9F2 16S ribosomal RNA gene, partial sequence
470	OP276384 Uncultured bacterium clone 1680 16S ribosomal RNA gene, partial sequence
470	MN157971 Uncultured bacterium clone A1416 16S ribosomal RNA gene, partial sequence
470	JQ781258 Uncultured bacterium clone MS42 16S ribosomal RNA gene, partial sequence
470	EU499479 Uncultured bacterium clone R11F 16S ribosomal RNA gene, partial sequence
470	FN396617 Uncultured marine bacterium partial 16S rRNA gene, clone s5_0_III_10
470	LC515561 Turicibacter sanguinis H006 gene for 16S ribosomal RNA, partial sequence
470	KJ453919 Uncultured bacterium clone XJDN-042 16S ribosomal RNA gene, partial sequence
470	KX997907 Uncultured bacterium clone Otu03211 16S ribosomal RNA gene, partial sequence
470	KJ476565 Uncultured bacterium clone UAFB_TA_33_25 16S ribosomal RNA gene, partial sequence
470	FN396667 Uncultured marine bacterium partial 16S rRNA gene, clone s5_0_VII_26
470	DQ444035 Uncultured bacterium clone PH1-34 16S ribosomal RNA gene, partial sequence
470	LN831119 Uncultured bacterium partial 16S rRNA gene, clone IXZSW1B04IQL8G
470	EU939417 Uncultured bacterium clone WF16S_158 16S ribosomal RNA gene, partial sequence
470	KM410902 Uncultured prokaryote clone PC08-66-68 16S ribosomal RNA gene, partial sequence
470	HG726045 Parachlamydia sp. C2 partial 16S rRNA gene, isolate C2
470	OW982297 Meleagris gallopavo genome assembly, chromosome: 6
470	AB205852 Uncultured bacterium gene for 16S rRNA, partial sequence, clone:12C-M14
470	BX294705 Uncultured bacterium partial 16S rRNA gene from clone 025F10_P_BA_P3
470	LR648627 uncultured bacterium partial 16S rRNA gene
470	MH525519 Uncultured bacterium clone OTU_1871 16S ribosomal RNA gene, partial sequence
470	KX173092 Uncultured bacterium clone ExbYyy41 16S ribosomal RNA gene, partial sequence
470	OX333081 Alloplasta piceator genome assembly, chromosome: 11
470	JQ371122 Uncultured bacterium clone NTS002Powerb5_9136 16S ribosomal RNA gene, partial sequence
470	KC901642 Uncultured bacterium clone Guaymas BIG B21C19 16S ribosomal RNA gene, partial sequence
470	EF075288 Uncultured Firmicutes bacterium clone GASP-WC2W2_F02 16S ribosomal RNA gene, partial sequen
470	CP054595 MAG: Candidatus Accumulibacter similis isolate SSB1 chromosome, complete genome
470	AB618456 Uncultured bacterium gene for 16S rRNA, partial sequence, clone: 07Nov4-56
470	LR639085 uncultured bacterium partial 16S rRNA gene
470	CP049241 Rhizobium pseudoryzae strain DSM 19479 chromosome, complete genome
469	JN245725 Uncultured bacterium clone eff15 16S ribosomal RNA gene, partial sequence
469	HM238169 Uncultured Verrucomicrobia bacterium clone BF_73 16S ribosomal RNA gene, partial sequence

Results provided by: BLAST nt database

BLAST nt - Assembly Identification - continued

Nucleotide Representa- tion	Description
469	KF145354 Uncultured soil bacterium clone S1P3019 16S ribosomal RNA gene, partial sequence
469	KC666473 Uncultured bacterium clone FL_03_77 16S ribosomal RNA gene, partial sequence
469	FM200965 Uncultured bacterium partial 16S rRNA gene, clone MBR-30_LF_AS79
469	KX270090 Uncultured <i>Opitutus</i> sp. clone 7DP2 16S ribosomal RNA gene, partial sequence
469	KJ566237 Uncultured Planctomycetales bacterium clone SD08_010 16S ribosomal RNA gene, partial seque
469	AM997579 Uncultured deep-sea bacterium 16S rRNA gene, clone Ucd1611
469	OP275809 Uncultured bacterium clone 10876 16S ribosomal RNA gene, partial sequence
469	JQ368587 Uncultured bacterium clone W023f7_3792 16S ribosomal RNA gene, partial sequence
469	KX974605 Uncultured bacterium clone OTU_7229 16S ribosomal RNA gene, partial sequence
469	JQ814965 Uncultured bacterium clone P7B12 16S ribosomal RNA gene, partial sequence
469	MH890433 Uncultured bacterium clone OTU1323_DC_1.15735 16S ribosomal RNA gene, partial sequence
469	LR722799 <i>Psychromonas</i> sp. HL983 partial 16S rRNA gene, isolate SW_HL_9_83
469	LN523163 Uncultured bacterium partial 16S rRNA gene, isolate Mineral.bttm.1.6.1.4_40087
469	LT842872 uncultured Verrucomicrobia bacterium partial 16S rRNA gene, isolate BACT_OTU_1327
469	MN156879 Uncultured bacterium clone A324 16S ribosomal RNA gene, partial sequence
469	JX105630 Uncultured bacterium clone T0-Ps-25C-34 16S ribosomal RNA gene, complete sequence
469	EF072758 Uncultured Fibrobacteres bacterium clone GASP-WA2S3_E12 16S ribosomal RNA gene, partial se
469	KX097691 Uncultured bacterium clone T3-1_169 16S ribosomal RNA gene, partial sequence
469	KF533803 Uncultured bacterium clone DEN_SIP_77 small subunit ribosomal RNA gene, partial sequence
469	KY522217 Uncultured bacterium clone ELA_111314_OTU_7196 16S ribosomal RNA gene, partial sequence
469	JF341451 Uncultured bacterium clone 36MIC028 16S ribosomal RNA gene, partial sequence
469	FJ822651 Uncultured Verrucomicrobia bacterium clone 34C1R-B1 16S ribosomal RNA gene, partial sequenc
469	MN157325 Uncultured bacterium clone A770 16S ribosomal RNA gene, partial sequence
469	MF452711 Uncultured bacterium clone OTU3005 16S ribosomal RNA gene, partial sequence
469	AY129812 Uncultured gamma proteobacterium clone GCPF47 16S ribosomal RNA gene, partial sequence
469	JX133538 Uncultured bacterium clone LG107 16S ribosomal RNA gene, partial sequence
469	KC432122 Uncultured bacterium clone SEAA1BA101 16S ribosomal RNA gene, partial sequence
469	KC631542 Uncultured bacterium clone YC1_B61 16S ribosomal RNA gene, partial sequence
469	CP018049 <i>Pseudomonas orientalis</i> strain F9 chromosome, complete genome
468	KT906617 Uncultured bacterium clone 41-57 16S ribosomal RNA gene, partial sequence
468	EU499476 Uncultured bacterium clone R11C 16S ribosomal RNA gene, partial sequence
468	EU135028 Uncultured bacterium clone FFCH12901 16S ribosomal RNA gene, partial sequence
468	JN868161 Uncultured planctomycete clone LZX206 16S ribosomal RNA gene, partial sequence
467	CU921642 Uncultured Bacteroidetes bacterium 16S rRNA gene from clone QEDS2DB02
467	MH462750 Uncultured bacterium clone OTU1705 16S ribosomal RNA gene, partial sequence
467	FJ936817 Uncultured bacterium clone kab100 16S ribosomal RNA gene, partial sequence
467	KP411856 Uncultured bacterium clone BT-56 16S ribosomal RNA gene, partial sequence
467	LR635718 uncultured bacterium partial 16S rRNA gene
467	JQ335968 Uncultured bacterium clone CC38 16S ribosomal RNA gene, partial sequence
467	LR638745 uncultured bacterium partial 16S rRNA gene
467	GU369275 Uncultured bacterium clone 0702002O23BGLSH12839 16S ribosomal RNA gene, partial sequence
467	CU923512 Uncultured Unclassified bacterium 16S rRNA gene from clone QEDQ2AC07
467	KF978800 Uncultured bacterium clone 16SOTU74 16S ribosomal RNA gene, partial sequence
467	JN609315 Uncultured bacterium clone 0-4-56 16S ribosomal RNA gene, partial sequence
467	MG803956 Uncultured Planctomycetaceae bacterium clone 3b_20966 16S ribosomal RNA gene, partial sequ
467	LR635368 uncultured bacterium partial 16S rRNA gene
467	MF452247 Uncultured bacterium clone OTU2587 16S ribosomal RNA gene, partial sequence
467	KM852064 Uncultured bacterium clone LIB075_B_A07 16S ribosomal RNA gene, partial sequence
467	LR653891 uncultured bacterium partial 16S rRNA gene
467	JQ323141 Uncultured planctomycete clone D12 16S ribosomal RNA gene, partial sequence
467	JN389756 Uncultured bacterium clone D41 16S ribosomal RNA gene, partial sequence
467	LR990166 <i>Notodonta dromedarius</i> genome assembly, chromosome: 7
467	EF063592 <i>Janthinobacterium lividum</i> strain BP01 clone pBPbeta genomic sequence
467	GU455121 Uncultured bacterium clone mesophilic_alkaline-6 16S ribosomal RNA gene, partial sequence

Results provided by: BLAST nt database

BLAST nt - Assembly Identification - continued

Nucleotide Representa- tion	Description
467	FR670496 Uncultured planctomycete partial 16S rRNA gene, clone LSmat.B149
467	JQ374547 Uncultured bacterium clone FL4Be1_6174 16S ribosomal RNA gene, partial sequence
467	LR653612 uncultured bacterium partial 16S rRNA gene
467	CP036164 Janibacter limosus strain P3-3-X1 chromosome, complete genome
466	KJ831768 Uncultured bacterium clone ABRQ5 16S ribosomal RNA gene, complete sequence
466	AB358996 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: AnDHS-P13
466	HE964765 uncultured bacterium partial 16S rRNA gene, clone 9c
466	HQ403221 Uncultured bacterium clone ABF-HB2-1 16S ribosomal RNA gene, complete sequence
466	KF697465 Uncultured bacterium clone MBR319 16S ribosomal RNA gene, partial sequence
466	MG803084 Uncultured bacterium clone 1b_82475 16S ribosomal RNA gene, partial sequence
466	MH466456 Uncultured bacterium clone OTU812 16S ribosomal RNA gene, partial sequence
466	KP717488 Uncultured Sphingobacteria bacterium clone R2-69 16S ribosomal RNA gene, partial sequence
466	AB928859 Uncultured bacterium gene for 16S rRNA, partial sequence, clone: 1-69-2-2-4
466	KY522233 Uncultured bacterium clone ELA_111314_OTU_7213 16S ribosomal RNA gene, partial sequence
466	FM201079 Uncultured bacterium partial 16S rRNA gene, clone MBR-8_LF_BF63
466	LR638555 uncultured bacterium partial 16S rRNA gene
466	LR643181 uncultured bacterium partial 16S rRNA gene
466	LT842319 Uncultured Bacteroidetes bacterium partial 16S rRNA gene, isolate BACT_OTU_30
466	LT842792 Uncultured Sphingobacterales bacterium partial 16S rRNA gene, isolate BACT_OTU_2064
466	GU933991 Uncultured bacterium clone SuspD9007C-ARISA730-OTUSSMO11 16S ribosomal RNA gene, partial se
466	LR635798 uncultured bacterium partial 16S rRNA gene
466	LR635411 uncultured bacterium partial 16S rRNA gene
466	LN549487 Uncultured bacterium partial 16S rRNA gene, isolate Mineral.top.2.1.6_352930
466	MF452830 Uncultured bacterium clone OTU3114 16S ribosomal RNA gene, partial sequence
466	LK393083 Uncultured bacterium partial 16S rRNA gene, clone S3-37
466	KT182616 Uncultured Pirellula sp. clone MBR blank 12 16S ribosomal RNA gene, partial sequence
466	MN156579 Uncultured bacterium clone A24 16S ribosomal RNA gene, partial sequence
466	EU499473 Uncultured bacterium clone R10A 16S ribosomal RNA gene, partial sequence
466	JF986958 Uncultured planctomycete clone Upland_40_6256 16S ribosomal RNA gene, partial sequence
466	KC238428 Uncultured bacterium clone PAE-PLA_13 16S ribosomal RNA gene, partial sequence
466	MF452686 Uncultured bacterium clone OTU2983 16S ribosomal RNA gene, partial sequence
466	CP092081 MAG: Nitrospira sp. isolate UBC2 chromosome
465	KC606219 Uncultured bacterium clone BAC2_1_B09 16S ribosomal RNA gene, partial sequence
465	KX976416 Uncultured bacterium clone OTU_9156 16S ribosomal RNA gene, partial sequence
465	JX085272 Uncultured bacterium clone LIB048_046_0928 16S ribosomal RNA gene, partial sequence
465	LR638213 uncultured bacterium partial 16S rRNA gene
465	AB567782 Uncultured bacterium gene for 16S rRNA, partial sequence, clone: RBC1-20
465	KT072568 Uncultured bacterium clone SLV_3WBAC_89 16S ribosomal RNA gene, partial sequence
465	MW082918 Uncultured bacterium clone Otu0089 16S ribosomal RNA gene, partial sequence
465	LR640590 uncultured bacterium partial 16S rRNA gene
465	MN157399 Uncultured bacterium clone A844 16S ribosomal RNA gene, partial sequence
465	LR646272 uncultured bacterium partial 16S rRNA gene
465	LR637470 uncultured bacterium partial 16S rRNA gene
465	LC279108 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: 15Y08
465	AB231428 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: SBR-Sludge-59
465	KC331316 Uncultured bacterium clone Ip098 16S ribosomal RNA gene, partial sequence
465	LR639194 uncultured bacterium partial 16S rRNA gene
465	JX040383 Uncultured bacterium clone a-81 16S ribosomal RNA gene, partial sequence
465	LR637661 uncultured bacterium partial 16S rRNA gene
465	KT835578 Uncultured bacterium isolate DGGE gel band RB2-65 16S ribosomal RNA gene, partial sequence
465	LR638998 uncultured bacterium partial 16S rRNA gene
465	AB196073 Uncultured bacterium gene for 16S rRNA, partial sequence, clone:TB003-59
465	KF830570 Uncultured bacterium clone 293 16S ribosomal RNA gene, partial sequence
465	MH890066 Uncultured bacterium clone OTU938_FY_2.9644 16S ribosomal RNA gene, partial sequence

Results provided by: BLAST nt database

BLAST nt - Assembly Identification - continued

Nucleotide Representa- tion	Description
465	LR639705 uncultured bacterium partial 16S rRNA gene
465	MH041137 Uncultured bacterium clone HL15-7 16S ribosomal RNA gene, partial sequence
465	MN156801 Uncultured bacterium clone A246 16S ribosomal RNA gene, partial sequence
465	JN391731 Uncultured bacterium clone Q7322-HYBA 16S ribosomal RNA gene, partial sequence
465	MK158205 Flavobacterium sp. strain CAR-11 16S ribosomal RNA gene, partial sequence
465	LR640506 uncultured bacterium partial 16S rRNA gene
465	LR650342 uncultured bacterium partial 16S rRNA gene
465	CP053446 Ignavibacteriae bacterium isolate IGN2 chromosome
465	MF689119 Uncultured bacterium clone OTU1052 16S ribosomal RNA gene, partial sequence
465	EF378368 Uncultured bacterium clone MA43_2003DFb_F02 16S small subunit ribosomal RNA gene, partial
465	LT842031 Uncultured Bacteroidetes bacterium partial 16S rRNA gene, isolate BACT_OTU_199
465	LR653025 uncultured bacterium partial 16S rRNA gene
465	LR636265 uncultured bacterium partial 16S rRNA gene
465	LR643508 uncultured bacterium partial 16S rRNA gene
465	KF428120 Uncultured bacterium clone IAN84 16S ribosomal RNA gene, partial sequence
465	MG804080 Uncultured Chitinophagaceae bacterium clone 1d_78649 16S ribosomal RNA gene, partial seque
465	MG801563 Uncultured bacterium clone 1a_17480 16S ribosomal RNA gene, partial sequence
465	JF341523 Uncultured bacterium clone 36MIC127 16S ribosomal RNA gene, partial sequence
465	LR635451 uncultured bacterium partial 16S rRNA gene
465	MF454951 Uncultured bacterium clone OTU78 16S ribosomal RNA gene, partial sequence
465	MG802813 Uncultured Saprospiraceae bacterium clone 2d_13376 16S ribosomal RNA gene, partial sequenc
465	LR643915 uncultured bacterium partial 16S rRNA gene
465	AB567892 Uncultured bacterium gene for 16S rRNA, partial sequence, clone: RBC4-48
465	LR638848 uncultured bacterium partial 16S rRNA gene
465	LR635500 uncultured bacterium partial 16S rRNA gene
465	KM177864 Uncultured bacterium clone Espejo_1_17_12_Water.14739 16S ribosomal RNA gene, partial s
465	MG803297 Uncultured Chitinophagaceae bacterium clone 1a_75910 16S ribosomal RNA gene, partial seque
465	LR653538 uncultured bacterium partial 16S rRNA gene
465	LR647576 uncultured bacterium partial 16S rRNA gene
465	MH890262 Uncultured bacterium clone OTU1142_RD_1.15241 16S ribosomal RNA gene, partial sequence
465	LR640937 uncultured bacterium partial 16S rRNA gene
465	AM945407 Uncultured bacterium partial 16S rRNA gene, clone Malla3.2
465	FJ828418 Uncultured Bacteroidetes bacterium clone MEsu06cnp11G9 16S ribosomal RNA gene, partial sequ
465	JX040408 Uncultured bacterium clone a-148 16S ribosomal RNA gene, partial sequence
465	GQ480089 Uncultured bacterium clone BXHB50 16S ribosomal RNA gene, partial sequence
465	LR634541 uncultured bacterium partial 16S rRNA gene
465	LR653477 uncultured bacterium partial 16S rRNA gene
465	HQ640602 Uncultured bacterium clone B136 16S ribosomal RNA gene, partial sequence
465	HQ014643 Uncultured bacterium clone z57 16S ribosomal RNA gene, partial sequence
465	JN609361 Uncultured bacterium clone 15-4-76 16S ribosomal RNA gene, partial sequence
465	MT631996 Sphingobacterium kitahiroshimense strain XJX-4 16S ribosomal RNA gene, partial sequence
465	LR647925 uncultured bacterium partial 16S rRNA gene
465	LT841857 Uncultured Bacteroidetes bacterium partial 16S rRNA gene, isolate BACT_OTU_55
465	LR646953 uncultured bacterium partial 16S rRNA gene
465	KC925580 Uncultured bacterium clone 16S_O1_33 16S ribosomal RNA gene, partial sequence
465	LR637531 uncultured bacterium partial 16S rRNA gene
465	KC605537 Uncultured bacterium clone BAC_6_2_D11 16S ribosomal RNA gene, partial sequence
465	JF828733 Uncultured bacterium clone 14 16S ribosomal RNA gene, partial sequence
465	MF690833 Uncultured bacterium clone OTU2859 16S ribosomal RNA gene, partial sequence
465	LT843627 uncultured Verrucomicrobia bacterium partial 16S rRNA gene, isolate BACT_OTU_1753
465	MG889577 Bacterium strain SM_303 16S ribosomal RNA gene, partial sequence
465	KM244567 Uncultured bacterium clone R5PLA13 16S ribosomal RNA gene, partial sequence
465	HG324501 Uncultured bacterium partial 16S rRNA gene, clone 15EHH16
465	FJ660583 Uncultured bacterium clone A129 16S ribosomal RNA gene, partial sequence

Results provided by: BLAST nt database

BLAST nt - Assembly Identification - continued

Nucleotide Representa- tion	Description
465	MH527482 Uncultured bacterium clone OTU_3834 16S ribosomal RNA gene, partial sequence
465	AB494261 Uncultured bacterium gene for 16S rRNA, partial sequence, clone: WB7
465	LC336201 Uncultured bacterium gene for 16S rRNA, partial sequence, clone: 12Jun10-013
465	LR651352 uncultured bacterium partial 16S rRNA gene
465	JN128670 Uncultured bacterium clone One_47 16S ribosomal RNA gene, partial sequence
465	KJ743442 Uncultured bacterium clone GYPB037 16S ribosomal RNA gene, partial sequence
465	EU925879 Uncultured bacterium clone 084F79 16S ribosomal RNA gene, partial sequence
465	MN157406 Uncultured bacterium clone A851 16S ribosomal RNA gene, partial sequence
465	AP025628 <i>Caldinitratiruptor microaerophilus</i> JCM 16183 DNA, complete genome
464	LC091363 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: DL-d10
464	MG803328 Uncultured <i>Ignavibacteriaceae</i> bacterium clone 1b_11898 16S ribosomal RNA gene, partial seq
464	LC091347 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: SW-c4
464	MF439557 Uncultured bacterium clone cfs354 16S ribosomal RNA gene, partial sequence
464	LR640872 uncultured bacterium partial 16S rRNA gene
464	EU104183 Uncultured bacterium clone N1512_10 16S ribosomal RNA gene, partial sequence
464	KM171564 Uncultured bacterium clone Espejo_1_17_12_Pumice.71952 16S ribosomal RNA gene, partial
464	QJ382445 Uncultured bacterium clone NC53c2_4928 16S ribosomal RNA gene, partial sequence
464	CP070811 MAG: <i>Anaerolineales</i> bacterium isolate bin12 chromosome
464	AC278735 <i>Homo sapiens</i> chromosome 10 clone VMRC59-403E14, complete sequence
464	KF945030 Uncultured bacterium clone FCW2A1 16S ribosomal RNA gene, partial sequence
464	DQ190150 Uncultured bacterium clone DBF1F1 16S ribosomal RNA gene, partial sequence
463	JF828741 Uncultured bacterium clone 129 16S ribosomal RNA gene, partial sequence
463	LR634705 uncultured bacterium partial 16S rRNA gene
463	KR003825 Uncultured <i>Candidatus Brocadia</i> sp. clone Br01 16S ribosomal RNA gene, partial sequence
463	EF632932 Uncultured bacterium clone Pia-s-66 16S ribosomal RNA gene, partial sequence
463	MH465878 Uncultured bacterium clone OTU205 16S ribosomal RNA gene, partial sequence
463	LN563231 Uncultured bacterium partial 16S rRNA gene, clone SIBZ390_N11D3_16S_B
463	LR638429 uncultured bacterium partial 16S rRNA gene
463	MG805300 Uncultured <i>Pirellula</i> sp. clone 2d_9575 16S ribosomal RNA gene, partial sequence
463	AY332581 Uncultured bacterium isolate PCR-DGGE gel band S1-3 16S ribosomal RNA gene, partial sequenc
463	CP100589 <i>Gallus gallus</i> breed Huxu chromosome 35
463	KM840952 Uncultured bacterium clone ED05 16S ribosomal RNA gene, partial sequence
463	KM454314 Uncultured bacterium clone UB-152 16S ribosomal RNA gene, partial sequence
463	CP075590 <i>Bacillus siamensis</i> strain IMD4001 chromosome, complete genome
462	FJ802201 Denitrifying bacterium enrichment culture clone NOA_1_F10 16S ribosomal RNA gene, partial
462	LT625243 Uncultured <i>Chlorobiales</i> bacterium partial 16S rRNA gene, isolate OTU 350
462	JN868153 Uncultured <i>Chloroflexi</i> bacterium clone LZX198 16S ribosomal RNA gene, partial sequence
462	KC551633 Uncultured bacterium clone GD 2-18 16S ribosomal RNA gene, partial sequence
462	LR637827 uncultured bacterium partial 16S rRNA gene
462	LT842159 Uncultured bacterium partial 16S rRNA gene, isolate BACT_OTU_438
462	CP060782 <i>Sphingomonas sediminicola</i> strain KACC 15039 chromosome, complete genome
462	GU917792 Uncultured bacterium clone F5K2Q4C04IV34X 16S ribosomal RNA gene, partial sequence
462	MG803908 Uncultured bacterium clone 1d_89648 16S ribosomal RNA gene, partial sequence
462	CP031694 <i>Bacillus velezensis</i> strain SRCM101368 chromosome, complete genome
462	KC470889 Uncultured bacterium clone N_137 16S ribosomal RNA gene, partial sequence
461	LN899827 <i>Ralstonia solanacearum</i> genome assembly 9 genomes, chromosome : IX
461	GU563822 <i>Pseudomonas fluorescens</i> strain IIM5 16S ribosomal RNA gene, partial sequence
460	LT841902 Uncultured <i>Nitrospira</i> sp. partial 16S rRNA gene, isolate BACT_OTU_80
460	MG803594 Uncultured <i>Nitrospira</i> sp. clone 1d_97616 16S ribosomal RNA gene, partial sequence
460	GU914114 Uncultured bacterium clone F5K2Q4C04IZ3BC 16S ribosomal RNA gene, partial sequence
460	CP046386 <i>Bacillus velezensis</i> strain GA1 chromosome
459	KU524878 Uncultured bacterium clone STS1 16S ribosomal RNA gene, partial sequence
459	CP054424 <i>Rhodoferrax</i> sp. BAB1 chromosome, complete genome
458	CP023714 <i>Rhodococcus ruber</i> strain YC-YT1 chromosome, complete genome

Results provided by: BLAST nt database

BLAST nt - Assembly Identification - continued

Nucleotide Representa- tion	Description
458	JQ378569 Uncultured bacterium clone WAm1h10_10752 16S ribosomal RNA gene, partial sequence
458	HQ264691 Uncultured bacterium clone SCP249 16S ribosomal RNA gene, partial sequence
458	CP043027 Salmonella enterica subsp. enterica strain AD19 chromosome, complete genome
457	LR638709 uncultured bacterium partial 16S rRNA gene
457	JX074698 Uncultured fungus clone QL57 18S ribosomal RNA gene, partial sequence
457	MH528372 Uncultured bacterium clone OTU_4724 16S ribosomal RNA gene, partial sequence
457	MG803658 Uncultured Methanoregula sp. clone 2d_27472 16S ribosomal RNA gene, partial sequence
457	CP045291 Delftia tsuruhatensis strain TR1180 chromosome, complete genome
457	AC188553 Pan troglodytes BAC clone CH251-326P23 from chromosome 7, complete sequence
457	LN715896 Uncultured bacterium partial 16S rRNA gene, clone A24A11
456	JN609370 Uncultured bacterium clone 15-4-120 16S ribosomal RNA gene, partial sequence
456	AP023348 Pseudomonas sp. RtlB026 DNA, complete genome
456	OB668256 Cyprideis torosa
455	EU376192 Uncultured bacterium clone NK2_514 16S ribosomal RNA gene, partial sequence
455	CP070639 MAG: Anaerolineales bacterium isolate bin917 chromosome
454	LC109041 Uncultured eukaryote gene for 18S rRNA, partial sequence, clone: AD_Nclone08
454	LR653980 uncultured bacterium partial 16S rRNA gene
454	LC176674 Uncultured alpha proteobacterium gene for 16S ribosomal RNA, partial sequence, clone: MIU_
453	KC299217 Uncultured bacterium clone 1451 16S ribosomal RNA gene, partial sequence
453	KX580903 Naegleria fowleri strain V419 mitochondrion, complete genome
453	XM_024867880 Amorphotoeca resiniae ATCC 22711 hypothetical protein (M430DRAFT_46844), partial mRNA
453	JN002791 Uncultured planctomycete clone F155cmContig23 16S ribosomal RNA gene, partial sequence
453	CP034537 Pseudomonas poae strain CAP-2018 chromosome, complete genome
453	OW971932 Acrobasis suaveilla genome assembly, chromosome: 4
453	KC605312 Uncultured bacterium clone CarbonSeq01a_030410_D05 16S ribosomal RNA gene, partial sequen
453	JQ374728 Uncultured bacterium clone WAm3g8_3553 16S ribosomal RNA gene, partial sequence
453	MH467043 Uncultured bacterium clone OTU1426 16S ribosomal RNA gene, partial sequence
452	EU881228 Uncultured bacterium clone KNR200711-196 16S ribosomal RNA gene, partial sequence
452	MF439408 Uncultured bacterium clone cfs187 16S ribosomal RNA gene, partial sequence
452	CP118289 Streptococcus pneumoniae D39 chromosome
452	JF300907 Uncultured bacterium clone BSH__81 16S ribosomal RNA gene, partial sequence
452	CP100594 Gallus gallus breed Huxu chromosome Z
451	LT907782 Nitrosomonas ureae strain Nm15 genome assembly, chromosome: I
451	LT840874 Uncultured bacterium partial 16S rRNA gene, clone t0_B04
451	EU536662 Uncultured bacterium clone nbt64f08 16S ribosomal RNA gene, partial sequence
451	MN629085 Plantibacter flavus strain B47 16S ribosomal RNA gene, partial sequence
451	MH467529 Uncultured bacterium clone OTU1939 16S ribosomal RNA gene, partial sequence
450	KM410912 Uncultured prokaryote clone PC08-66-80 16S ribosomal RNA gene, partial sequence
450	KU000220 Uncultured Parcubacteria group bacterium clone PHAbac73 16S ribosomal RNA gene, partial seq
450	MF440294 Uncultured bacterium clone cfs1169 16S ribosomal RNA gene, partial sequence
450	GU914254 Uncultured bacterium clone F5K2Q4C04J0SXV 16S ribosomal RNA gene, partial sequence
450	KX123668 Candidatus Nomurabacteria bacterium GW2011_GWE2_31_40 16S ribosomal RNA gene, partial se
450	MG801982 Uncultured bacterium clone 2d_48719 16S ribosomal RNA gene, partial sequence
450	JX564302 Uncultured bacterium clone EF_bacF12 16S ribosomal RNA gene, partial sequence
450	LT844135 Uncultured bacterium partial 16S rRNA gene, isolate BACT_OTU_1363
450	MH528861 Uncultured bacterium clone OTU_5213 16S ribosomal RNA gene, partial sequence
450	HQ697574 Uncultured bacterium clone T46 16S ribosomal RNA gene, partial sequence
450	LR645412 uncultured bacterium partial 16S rRNA gene
450	HM486297 Uncultured candidate division OD1 bacterium clone Jab PL2W2F10 16S ribosomal RNA gene, part
450	JQ368790 Uncultured bacterium clone W201a9_13827 16S ribosomal RNA gene, partial sequence
450	HQ241817 Uncultured marine bacterium clone Sp02sw36 16S ribosomal RNA gene, partial sequence
450	FJ623353 Uncultured bacterium clone 95 16S ribosomal RNA gene, partial sequence
450	LR653361 uncultured bacterium partial 16S rRNA gene
450	LR590484 Sphingobacterium thalophilum strain NCTC11429 genome assembly, chromosome: 1

Results provided by: BLAST nt database

BLAST nt - Assembly Identification - continued

Nucleotide Representa- tion	Description
450	KM031195 Uncultured bacterium clone C_0.5m_38 16S ribosomal RNA gene, partial sequence
450	NC_022262 Nannochloropsis limnetica strain CCMP505 chloroplast, complete genome
450	JN397714 Uncultured bacterium clone BSB0101-06 16S ribosomal RNA gene, partial sequence
450	JQ379206 Uncultured bacterium clone TE2b515f6_11264 16S ribosomal RNA gene, partial sequence
450	MH529223 Uncultured bacterium clone OTU_5575 16S ribosomal RNA gene, partial sequence
449	HQ911246 Uncultured bacterium clone AB_19 16S ribosomal RNA gene, partial sequence
449	MF439221 Uncultured bacterium clone cafs1988 16S ribosomal RNA gene, partial sequence
449	AB518121 Uncultured bacterium gene for 16S rRNA, partial sequence, clone: NG_inoculum_51
449	LT843495 Uncultured bacterium partial 16S rRNA gene, isolate BACT_OTU_2743
449	JN391713 Uncultured bacterium clone Q7298-HYBA 16S ribosomal RNA gene, partial sequence
449	KF275246 Uncultured microorganism clone RB1_original55 16S ribosomal RNA gene, partial sequence
449	AB504963 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: oze05B11
449	JQ367983 Uncultured bacterium clone WAm3e1_13661 16S ribosomal RNA gene, partial sequence
449	LR647278 uncultured bacterium partial 16S rRNA gene
449	MF002242 Uncultured Chloroflexi bacterium clone 716_53 16S ribosomal RNA gene, partial sequence
449	MF440193 Uncultured bacterium clone cafs1056 16S ribosomal RNA gene, partial sequence
449	AB806167 Uncultured bacterium gene for 16S rRNA, partial sequence, clone: smkt_Cyano_001_055
449	KC424740 Uncultured bacterium clone ZY-30 16S ribosomal RNA gene, partial sequence
449	KX973624 Uncultured bacterium clone OTU_6191 16S ribosomal RNA gene, partial sequence
449	LR654035 uncultured bacterium partial 16S rRNA gene
449	MF439618 Uncultured bacterium clone cafs420 16S ribosomal RNA gene, partial sequence
449	KX974772 Uncultured bacterium clone OTU_7407 16S ribosomal RNA gene, partial sequence
449	KX968952 Uncultured bacterium clone OTU_1285 16S ribosomal RNA gene, partial sequence
449	KX968729 Uncultured bacterium clone OTU_1051 16S ribosomal RNA gene, partial sequence
449	LR646303 uncultured bacterium partial 16S rRNA gene
449	AF479545 Acanthamoeba tubiashi strain OC15C 16S small subunit ribosomal RNA gene, partial sequence;
449	KP098622 Uncultured bacterium clone hkif5 16S ribosomal RNA gene, partial sequence
449	CU927577 Uncultured Unclassified bacterium 16S rRNA gene from clone QEDN4DE01
449	KJ645592 Uncultured bacterium clone B58 16S ribosomal RNA gene, partial sequence
449	KX781057 Uncultured bacterium clone CA341 16S ribosomal RNA gene, partial sequence
449	JX105555 Uncultured bacterium clone T0-An-20C-96 16S ribosomal RNA gene, complete sequence
449	KC290405 Uncultured bacterium clone NY-05 16S ribosomal RNA gene, partial sequence
449	KX823889 Uncultured bacterium clone 4-74 16S ribosomal RNA gene, partial sequence
449	HE602783 Uncultured bacterium partial 16S rRNA gene, clone YCczP3D6
449	JN471635 Uncultured organism clone SBYS_477 16S ribosomal RNA gene, partial sequence
449	AB196101 Uncultured bacterium gene for 16S rRNA, partial sequence, clone:TB003-124
449	MF439258 Uncultured bacterium clone cafs20 16S ribosomal RNA gene, partial sequence
449	MH528866 Uncultured bacterium clone OTU_5218 16S ribosomal RNA gene, partial sequence
449	HM240281 Bacterium enrichment culture clone CBIC5EC2 clone CBIC5EC2 16S ribosomal RNA gene, partial
449	KT424354 Uncultured sulfate-reducing bacterium clone DSV_95 16S ribosomal RNA gene, partial sequenc
449	KX971435 Uncultured bacterium clone OTU_3873 16S ribosomal RNA gene, partial sequence
449	LT607750 Micromonospora echinaurantiaca strain DSM 43904 genome assembly, chromosome: I
448	FJ947147 Uncultured sludge bacterium clone ASB83 16S ribosomal RNA gene, partial sequence
448	MW083453 Uncultured bacterium clone Otu0729 16S ribosomal RNA gene, partial sequence
448	LN527914 Uncultured bacterium partial 16S rRNA gene, isolate Mineral.bttm.1.6.1.4_264460
448	KJ831796 Uncultured bacterium clone ABRQ45 16S ribosomal RNA gene, complete sequence
448	MK788131 Bdellovibrio sp. strain SDWB-DG1 16S ribosomal RNA gene, partial sequence
448	JF116277 Uncultured bacterium clone ncd1350a01c1 16S ribosomal RNA gene, partial sequence
448	MW083054 Uncultured bacterium clone Otu0232 16S ribosomal RNA gene, partial sequence
448	JF341576 Uncultured bacterium clone 37MIC034 16S ribosomal RNA gene, partial sequence
448	HQ114096 Uncultured bacterium clone V201-81 16S ribosomal RNA gene, partial sequence
448	LC192415 Uncultured anaerobic ammonium-oxidizing bacterium gene for 16S ribosomal RNA, partial seque
448	JX564301 Uncultured bacterium clone EF_bacF11 16S ribosomal RNA gene, partial sequence
448	LR642330 uncultured bacterium partial 16S rRNA gene

Results provided by: BLAST nt database

BLAST nt - Assembly Identification - continued

Nucleotide Representa- tion	Description
448	KP098631 Uncultured bacterium clone hkih2 16S ribosomal RNA gene, partial sequence
448	LR637124 uncultured bacterium partial 16S rRNA gene
448	CU924581 Uncultured Deltaproteobacteria bacterium 16S rRNA gene from clone QEDP3BB06
448	LR644900 uncultured bacterium partial 16S rRNA gene
448	KJ834299 Uncultured actinomycete clone Z3-6 16S ribosomal RNA gene, partial sequence
448	LR648084 uncultured bacterium partial 16S rRNA gene
448	MN156795 Uncultured bacterium clone A240 16S ribosomal RNA gene, partial sequence
448	KT851823 Uncultured bacterium clone NY6_50 16S ribosomal RNA gene, partial sequence
448	MF691369 Uncultured bacterium clone OTU3401 16S ribosomal RNA gene, partial sequence
448	AP019377 Thermogemmatispora sp. A3-2 DNA, complete genome
448	KF145741 Uncultured bacterium clone S2P3007 16S ribosomal RNA gene, partial sequence
448	LN570848 Uncultured bacterium partial 16S rRNA gene, clone SICT419_N9D2_16S_B
448	KX968926 Uncultured bacterium clone OTU_1258 16S ribosomal RNA gene, partial sequence
448	MN156613 Uncultured bacterium clone A58 16S ribosomal RNA gene, partial sequence
448	KX968565 Uncultured bacterium clone OTU_882 16S ribosomal RNA gene, partial sequence
448	MF081197 Uncultured bacterium clone 1818 16S ribosomal RNA gene, partial sequence
448	GQ356127 Uncultured planctomycete clone Pla_5GA-6 16S ribosomal RNA gene, partial sequence
448	MN157120 Uncultured bacterium clone A565 16S ribosomal RNA gene, partial sequence
448	FN396946 Uncultured bacterium partial 16S rRNA gene, clone 11
448	LN567634 Uncultured bacterium partial 16S rRNA gene, clone SIFA1110_N12D4_16S_B
448	KY691299 Uncultured bacterium clone 858 16S ribosomal RNA gene, partial sequence
448	CP100562 Gallus gallus breed Huxu chromosome 8
448	FJ223317 Uncultured bacterium clone 137 16S ribosomal RNA gene, partial sequence
448	JQ197184 Uncultured bacterium clone SeaWat_63426 16S ribosomal RNA gene, partial sequence
448	GU369184 Uncultured bacterium clone 0702002I19BGLSE10862 16S ribosomal RNA gene, partial sequence
448	LR634538 uncultured bacterium partial 16S rRNA gene
448	KX968725 Uncultured bacterium clone OTU_1047 16S ribosomal RNA gene, partial sequence
448	LT844175 Uncultured bacterium partial 16S rRNA gene, isolate BACT_OTU_2629
448	LN536609 Uncultured bacterium partial 16S rRNA gene, isolate Mineral.top.1.6.1.4_226857
448	JX105537 Uncultured bacterium clone T0-An-20C-46 16S ribosomal RNA gene, complete sequence
448	MH466624 Uncultured bacterium clone OTU987 16S ribosomal RNA gene, partial sequence
448	JN590968 Uncultured bacterium clone SBR-2_Day430_Clone-8 16S ribosomal RNA gene, partial sequence
448	HF677133 Uncultured Chloroflexi bacterium partial 16S rRNA gene, clone TPB_GMAT_SPRING12_24
448	KC551552 Uncultured bacterium clone GD 1-26 16S ribosomal RNA gene, partial sequence
448	MN156896 Uncultured bacterium clone A341 16S ribosomal RNA gene, partial sequence
448	AP022844 Cutibacterium acnes SZ1 DNA, complete genome
448	CP027773 Variovorax sp. PMC12 chromosome 1, complete sequence
447	JQ926654 Uncultured bacterium clone DA26 16S ribosomal RNA gene, partial sequence
447	MF968514 Uncultured bacterium clone OTU960_DOL1.35101 16S ribosomal RNA gene, partial sequence
447	JQ376528 Uncultured bacterium clone NTS001Powera2_19452 16S ribosomal RNA gene, partial sequence
447	JN398093 Uncultured bacterium clone SWB0202-10 16S ribosomal RNA gene, partial sequence
447	DQ868371 Uncultured bacterium clone SNCH2-1 16S ribosomal RNA gene, partial sequence
447	LR698992 Laribacter hongkongensis isolate MGYG-HGUT-02398 genome assembly, chromosome: 1
447	HG529169 Uncultured bacterium partial 16S rRNA gene, clone SJ_fim3_30
447	MF440187 Uncultured bacterium clone cafs1049 16S ribosomal RNA gene, partial sequence
447	KJ831794 Uncultured bacterium clone ABRQ42 16S ribosomal RNA gene, complete sequence
447	KM263549 Bacterium enrichment culture clone Anammox_11 16S ribosomal RNA gene, partial sequence
447	MN252472 Uncultured bacterium clone 5 16S ribosomal RNA gene, partial sequence
447	LC122014 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: KNA6-GT-5
447	LR635306 uncultured bacterium partial 16S rRNA gene
447	MW083171 Uncultured bacterium clone Otu0361 16S ribosomal RNA gene, partial sequence
447	GQ350987 Uncultured bacterium clone SHBH792 16S ribosomal RNA gene, partial sequence
447	LR636729 uncultured bacterium partial 16S rRNA gene
447	LR639538 uncultured bacterium partial 16S rRNA gene

Results provided by: BLAST nt database

BLAST nt - Assembly Identification - continued

Nucleotide Representa- tion	Description
447	JN441292 Uncultured organism clone SBYB_4573 16S ribosomal RNA gene, partial sequence
447	MF082436 Uncultured bacterium clone 3057 16S ribosomal RNA gene, partial sequence
447	AB205862 Uncultured bacterium gene for 16S rRNA, partial sequence, clone:12C-M24
447	AB206032 Uncultured bacterium gene for 16S rRNA, partial sequence, clone:OS-101
447	JQ026725 Uncultured Chloroflexi bacterium clone HX30d528 16S ribosomal RNA gene, partial sequence
447	KC238412 Uncultured bacterium clone PAE-EN23_15 16S ribosomal RNA gene, partial sequence
447	AB775711 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: B-48
447	KX975625 Uncultured bacterium clone OTU_8309 16S ribosomal RNA gene, partial sequence
447	LR637780 uncultured bacterium partial 16S rRNA gene
447	LT844223 Uncultured bacterium partial 16S rRNA gene, isolate BACT_OTU_2766
447	JX105578 Uncultured bacterium clone T30-An-20C-38 16S ribosomal RNA gene, complete sequence
447	HE577683 Uncultured bacterium partial 16S rRNA gene, clone Fe-As co-precipitate clone B2
447	MG803532 Uncultured bacterium clone 2a_79225 16S ribosomal RNA gene, partial sequence
447	LR640979 uncultured bacterium partial 16S rRNA gene
447	JX172908 Uncultured bacterium clone PB17026-2A_C04 16S ribosomal RNA gene, partial sequence
447	KR086556 Uncultured Lachnospiraceae bacterium clone DH162B44 16S ribosomal RNA gene, partial sequenc
447	LN569437 Uncultured bacterium partial 16S rRNA gene, clone SIHA456_N9D0_16S_B
447	MW167673 Uncultured bacterium clone uncultured_bac14 16S ribosomal RNA gene, partial sequence
447	MH530521 Uncultured bacterium clone OTU_6873 16S ribosomal RNA gene, partial sequence
447	JN222427 Uncultured bacterium clone OTU1 16S ribosomal RNA gene, partial sequence
447	JQ781290 Uncultured bacterium clone MS36 16S ribosomal RNA gene, partial sequence
447	LR638952 uncultured bacterium partial 16S rRNA gene
447	JN431659 Uncultured organism clone SBXY_7149 16S ribosomal RNA gene, partial sequence
447	MW127766 Uncultured bacterium clone SupB1032 16S ribosomal RNA gene, partial sequence
447	MF440106 Uncultured bacterium clone cafs961 16S ribosomal RNA gene, partial sequence
447	JN922598 Uncultured microorganism clone GJOEXAY04II82D 16S ribosomal RNA gene, partial sequence
447	MW083751 Uncultured bacterium clone Otu1182 16S ribosomal RNA gene, partial sequence
447	AF271327 Uncultured planctomycete clone34 16S ribosomal RNA gene, partial sequence
447	CP100582 Gallus gallus breed Huxu chromosome 28
447	OW982293 Meleagris gallopavo genome assembly, chromosome: 3
447	MW083326 Uncultured bacterium clone Otu0552 16S ribosomal RNA gene, partial sequence
447	KP388640 Uncultured bacterium clone MISEQ01_89_000000000-A647M_1_2102_10705_19449 16S ribosoma
447	JF812549 Uncultured deep-sea bacterium clone b111-38 16S ribosomal RNA gene, partial sequence
447	LR642457 uncultured bacterium partial 16S rRNA gene
447	MG802944 Uncultured Fusibacter sp. clone 2b_62616 16S ribosomal RNA gene, partial sequence
447	LR646886 uncultured bacterium partial 16S rRNA gene
447	MF453456 Uncultured bacterium clone OTU3686 16S ribosomal RNA gene, partial sequence
447	KY691541 Uncultured bacterium clone 1116 16S ribosomal RNA gene, partial sequence
447	JN641438 Uncultured bacterium clone RRD10.0May-86 16S ribosomal RNA gene, partial sequence
447	JN644190 Uncultured bacterium clone 10NIL31 16S ribosomal RNA gene, partial sequence
447	MG801301 Uncultured Victivallaceae bacterium clone 1b_45268 16S ribosomal RNA gene, partial sequenc
447	KX975618 Uncultured bacterium clone OTU_8301 16S ribosomal RNA gene, partial sequence
447	HG324843 Uncultured bacterium partial 16S rRNA gene, clone 15EHG1
447	LT842848 Uncultured bacterium partial 16S rRNA gene, isolate BACT_OTU_248
447	MH467347 Uncultured bacterium clone OTU1749 16S ribosomal RNA gene, partial sequence
446	GQ421065 Uncultured bacterium clone RUGL1-84 16S ribosomal RNA gene, partial sequence
446	MG802905 Uncultured bacterium clone 2a_20738 16S ribosomal RNA gene, partial sequence
446	LC094818 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: AMX001AXH7K
446	EU332818 Uncultured organism clone OTU177 16S ribosomal RNA gene, partial sequence
446	LR641293 uncultured bacterium partial 16S rRNA gene
446	LC211568 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: E442
446	AB479728 Uncultured bacterium gene for 16S rRNA, partial sequence, clone: AOA-118
446	MW083229 Uncultured bacterium clone Otu0429 16S ribosomal RNA gene, partial sequence
446	LR640517 uncultured bacterium partial 16S rRNA gene

Results provided by: BLAST nt database

BLAST nt - Assembly Identification - continued

Nucleotide Representa- tion	Description
446	FJ479984 Uncultured candidate division SR1 bacterium clone ZSR1-151 16S ribosomal RNA gene, partial
446	MG803352 Uncultured bacterium clone 2a_54503 16S ribosomal RNA gene, partial sequence
446	LR654589 uncultured bacterium partial 16S rRNA gene
446	JX040371 Uncultured bacterium clone a-39 16S ribosomal RNA gene, partial sequence
446	LR640296 uncultured bacterium partial 16S rRNA gene
446	LR634906 uncultured bacterium partial 16S rRNA gene
446	KC432470 Uncultured bacterium clone SEAC1DC021 16S ribosomal RNA gene, partial sequence
446	JQ379483 Uncultured bacterium clone WIR21Faste12_10254 16S ribosomal RNA gene, partial sequence
446	LT843650 Uncultured bacterium partial 16S rRNA gene, isolate BACT_OTU_985
446	MG804972 Uncultured Caldilineaceae bacterium clone 1c_66231 16S ribosomal RNA gene, partial sequenc
446	KJ743412 Uncultured bacterium clone GYPB006 16S ribosomal RNA gene, partial sequence
446	MG803892 Uncultured bacterium clone 3b_714 16S ribosomal RNA gene, partial sequence
446	KJ783076 Uncultured bacterium clone Wu-B235 16S ribosomal RNA gene, partial sequence
446	LC094815 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: AMX001B4XDF
446	AF234688 Uncultured sludge bacterium H5 16S ribosomal RNA gene, partial sequence
446	KC189783 Uncultured bacterium clone Wat103 16S ribosomal RNA gene, partial sequence
446	KT122314 Uncultured Myxococcales bacterium clone TGRWLFZ-16s-SI334 16S ribosomal RNA gene, partial s
446	KF697529 Uncultured bacterium clone MBR504 16S ribosomal RNA gene, partial sequence
446	KX780825 Uncultured bacterium clone CA108 16S ribosomal RNA gene, partial sequence
446	LR635569 uncultured bacterium partial 16S rRNA gene
446	MW083165 Uncultured bacterium clone Otu0355 16S ribosomal RNA gene, partial sequence
446	LC321015 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: Bac43
446	MF692222 Uncultured bacterium clone OTU4269 16S ribosomal RNA gene, partial sequence
446	X74006 P.zopfii plastid gene for 18S small subunit rRNA
446	LT843956 Uncultured Leptonema sp. partial 16S rRNA gene, isolate BACT_OTU_245
446	KU000148 Uncultured Anaerolineales bacterium clone PHAbac294 16S ribosomal RNA gene, partial sequenc
446	LC000977 Uncultured Comamonas sp. gene for 16S ribosomal RNA, partial sequence, clone: LR427A-47
446	MG805247 Uncultured Caldilineaceae bacterium clone 3c_21597 16S ribosomal RNA gene, partial sequenc
446	LR646743 uncultured bacterium partial 16S rRNA gene
446	CP060231 MAG: Candidatus Nomurabacteria bacterium isolate HK-STAS-PATE-36 chromosome
446	KY082952 Uncultured bacterium clone ABR-23 16S ribosomal RNA gene, partial sequence
446	MF439611 Uncultured Candidatus Saccharibacteria bacterium clone cafs412 16S ribosomal RNA gene, part
446	KU000065 Uncultured Hyphomicrobiales bacterium clone PHAbac281 16S ribosomal RNA gene, partial seque
446	MW083895 Uncultured bacterium clone Otu1457 16S ribosomal RNA gene, partial sequence
446	LR636645 uncultured bacterium partial 16S rRNA gene
446	JQ640459 Uncultured bacterium clone HAH72_43 16S ribosomal RNA gene, partial sequence
446	LR595215 uncultured bacterium partial 16S rRNA gene
446	LN530683 Uncultured bacterium partial 16S rRNA gene, isolate Mineral.btm.1.6.1.4_389778
446	FN827236 Uncultured bacterium partial 16S rRNA gene, clone SMBR-NOV-B98
446	LN571119 Uncultured bacterium partial 16S rRNA gene, clone SICT1481_N9D2_16S_B
446	LR651496 uncultured bacterium partial 16S rRNA gene
446	AB775710 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: B-47
446	KX972534 Uncultured bacterium clone OTU_5033 16S ribosomal RNA gene, partial sequence
446	LR635784 uncultured bacterium partial 16S rRNA gene
446	MN157131 Uncultured bacterium clone A576 16S ribosomal RNA gene, partial sequence
446	LR641088 uncultured bacterium partial 16S rRNA gene
446	MW083502 Uncultured bacterium clone Otu0801 16S ribosomal RNA gene, partial sequence
446	JN621501 Uncultured bacterium clone ST0-F5 16S ribosomal RNA gene, partial sequence
446	MW083013 Uncultured bacterium clone Otu0188 16S ribosomal RNA gene, partial sequence
446	HQ702898 Bacterium enrichment culture clone 26016 16S ribosomal RNA gene, partial sequence
446	JF989353 Uncultured bacterium clone Upland_300_8653 16S ribosomal RNA gene, partial sequence
446	MN156736 Uncultured bacterium clone A181 16S ribosomal RNA gene, partial sequence
446	KJ782997 Uncultured bacterium clone Wu-B156 16S ribosomal RNA gene, partial sequence
446	LR644032 uncultured bacterium partial 16S rRNA gene

Results provided by: BLAST nt database

BLAST nt - Assembly Identification - continued

Nucleotide Representa- tion	Description
446	LR638151 uncultured bacterium partial 16S rRNA gene
446	HG917466 Uncultured bacterium partial 16S rRNA gene, isolate BAG, start, clone A52
446	LR640035 uncultured bacterium partial 16S rRNA gene
446	KM841231 Uncultured bacterium clone JE272 16S ribosomal RNA gene, partial sequence
446	AB479684 Uncultured bacterium gene for 16S rRNA, partial sequence, clone: 07May_OTU8-37_cln8-48
446	LT625532 Uncultured bacterium partial 16S rRNA gene, isolate OTU 620
446	AB658189 Uncultured bacterium RNA for 16S rRNA, partial sequence, clone: B0618R001_K19
446	EF651271 Uncultured Chloroflexi bacterium clone AUVE_06C02 16S ribosomal RNA gene, partial sequence
446	HF586946 Uncultured bacterium partial 16S rRNA gene, clone mBrB_56339
446	LR649465 uncultured bacterium partial 16S rRNA gene
446	FJ466102 Uncultured bacterium clone C174 16S ribosomal RNA gene, partial sequence
446	LR639793 uncultured bacterium partial 16S rRNA gene
446	JN418919 Uncultured soil bacterium clone Ai 16S ribosomal RNA gene, partial sequence
446	JN409169 Uncultured bacterium clone HG-B0254 16S ribosomal RNA gene, partial sequence
446	LR636761 uncultured bacterium partial 16S rRNA gene
446	X84474 Uncultured bacterium 16S rRNA gene, clone SBR1031
446	HQ120446 Uncultured bacterium isolate 1112864242319 16S ribosomal RNA gene, partial sequence
446	HE861255 Uncultured bacterium partial 16S rRNA gene, clone6C_29
446	FQ660228 Uncultured bacterium 16S ribosomal RNA gene clone D3AH121, partial sequence
446	MG804811 Uncultured bacterium clone 1a_57366 16S ribosomal RNA gene, partial sequence
446	MW083385 Uncultured bacterium clone Otu0631 16S ribosomal RNA gene, partial sequence
446	HE650055 Uncultured bacteria partial 16S rRNA gene, clone 14c
446	HQ640640 Uncultured bacterium clone B190 16S ribosomal RNA gene, partial sequence
446	AB206034 Uncultured bacterium gene for 16S rRNA, partial sequence, clone:OS-103
446	LN715973 Uncultured bacterium partial 16S rRNA gene, clone A27C11
446	MW083093 Uncultured bacterium clone Otu0272 16S ribosomal RNA gene, partial sequence
446	GQ356940 Uncultured bacterium clone Fe_B_123 16S ribosomal RNA gene, partial sequence
446	LR638138 uncultured bacterium partial 16S rRNA gene
446	GQ356176 Uncultured planctomycete clone 5GA_Pla_HKP_30 16S ribosomal RNA gene, partial sequence
446	KT223156 Uncultured bacterium clone 022_4650_24_Oto1_13.1 16S ribosomal RNA gene, partial sequen
446	LR649324 uncultured bacterium partial 16S rRNA gene
446	MW083703 Uncultured bacterium clone Otu1098 16S ribosomal RNA gene, partial sequence
446	MF081528 Uncultured bacterium clone 2149 16S ribosomal RNA gene, partial sequence
446	AB630556 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: MPB1-174
446	KX097810 Uncultured bacterium clone T3-1_297 16S ribosomal RNA gene, partial sequence
446	CU921218 Uncultured Unclassified bacterium 16S rRNA gene from clone QEDS1DA06
446	LR653246 uncultured bacterium partial 16S rRNA gene
446	LR648501 uncultured bacterium partial 16S rRNA gene
446	JN220740 Uncultured organism clone 802 16S ribosomal RNA gene, partial sequence
446	MW082919 Uncultured bacterium clone Otu0090 16S ribosomal RNA gene, partial sequence
446	CP065013 Candidatus Saccharibacteria bacterium isolate Ribe_18-Q3-R11-54_BATAC.540_fly chromosome
446	HM460600 Uncultured bacterium clone H33-11 16S ribosomal RNA gene, partial sequence
446	LR636634 uncultured bacterium partial 16S rRNA gene
446	JQ287279 Uncultured bacterium clone 3M33_072 16S ribosomal RNA gene, partial sequence
446	JN532329 Uncultured organism clone SBZO_5340 16S ribosomal RNA gene, partial sequence
446	EU746787 Uncultured bacterium clone TC3_20 16S ribosomal RNA gene, partial sequence
446	KX968367 Uncultured bacterium clone OTU_678 16S ribosomal RNA gene, partial sequence
446	JQ379626 Uncultured bacterium clone NC2F2c12_20270 16S ribosomal RNA gene, partial sequence
446	GQ348437 Uncultured Chloroflexi bacterium clone SGTA620 16S ribosomal RNA gene, partial sequence
446	LR647349 uncultured bacterium partial 16S rRNA gene
446	MN156732 Uncultured bacterium clone A177 16S ribosomal RNA gene, partial sequence
446	FJ497601 Uncultured bacterium clone VS_CL-349 16S ribosomal RNA gene, partial sequence
446	KC603102 Uncultured bacterium clone J15-9 16S ribosomal RNA gene, partial sequence
446	GQ487899 Uncultured bacterium clone T1-16 16S ribosomal RNA gene, partial sequence

Results provided by: BLAST nt database

BLAST nt - Assembly Identification - continued

Nucleotide Representa- tion	Description
446	MW605159 Acetobacteraceae bacterium KSS8 16S ribosomal RNA gene, partial sequence
446	LR637229 uncultured bacterium partial 16S rRNA gene
446	KY693184 Uncultured bacterium clone BS.DC1.227 16S ribosomal RNA gene, partial sequence
446	LR641416 uncultured bacterium partial 16S rRNA gene
445	LR636435 uncultured bacterium partial 16S rRNA gene
445	LC091365 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: DL-f4
445	LC091360 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: DL-b1
445	LC212737 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: D1112
445	LR639414 uncultured bacterium partial 16S rRNA gene
445	LR640256 uncultured bacterium partial 16S rRNA gene
445	FJ710779 Uncultured bacterium clone Dok60 16S ribosomal RNA gene, partial sequence
445	AY549548 Endosymbiont of Acanthamoeba sp. AC305 16S ribosomal RNA gene, partial sequence
445	EU192216 Uncultured bacterium clone GX31 16S ribosomal RNA gene, partial sequence
445	LR644940 uncultured bacterium partial 16S rRNA gene
445	JN397720 Uncultured bacterium clone BSB0101-15 16S ribosomal RNA gene, partial sequence
445	MN845213 Uncultured Chloroflexi bacterium clone 9 16S ribosomal RNA gene, partial sequence
445	JX521310 Uncultured bacterium clone EPS09_OK_001C_69 16S ribosomal RNA gene, partial sequence
445	HE614762 Uncultured alpha proteobacterium partial 16S rRNA gene, clone E02L-2
445	KR089618 Uncultured bacterium clone LSZ-B-85 16S ribosomal RNA gene, partial sequence
445	MW084120 Uncultured bacterium clone Otu1880 16S ribosomal RNA gene, partial sequence
445	FJ933456 Uncultured Caldilineaceae bacterium clone REV_R1PII_4F 16S ribosomal RNA gene, partial se
445	LR644546 uncultured bacterium partial 16S rRNA gene
445	LR638368 uncultured bacterium partial 16S rRNA gene
445	KX270178 Uncultured Bryobacter sp. clone 7EP3 16S ribosomal RNA gene, partial sequence
445	KX656699 Bacterium enrichment culture isolate DGGE gel band _2014_B28 16S ribosomal RNA gene, part
445	LC000870 Bacterium endosymbiont of Acanthamoeba sp. gene for 16S ribosomal RNA, partial sequence, cl
445	JQ259188 Uncultured bacterium isolate DGGE gel band 5 16S ribosomal RNA gene, partial sequence
445	EU133488 Uncultured bacterium clone FFCH7974 16S ribosomal RNA gene, partial sequence
445	MW083439 Uncultured bacterium clone Otu0710 16S ribosomal RNA gene, partial sequence
445	LT625321 Uncultured Pedomicrobium sp. partial 16S rRNA gene, isolate OTU 422
445	MG801981 Uncultured Alphaproteobacteria bacterium clone 1d_62209 16S ribosomal RNA gene, partial se
445	MH930468 Uncultured bacterium clone OTU 74 16S ribosomal RNA gene, partial sequence
445	CP003060 Glaciecola nitratireducens FR1064, complete genome
445	KX975225 Uncultured bacterium clone OTU_7885 16S ribosomal RNA gene, partial sequence
445	JX434187 Uncultured bacterium clone HS4850B_03A 16S ribosomal RNA gene, partial sequence
445	LT842871 Uncultured bacterium partial 16S rRNA gene, isolate BACT_OTU_1006
445	CU925805 Uncultured Alphaproteobacteria bacterium 16S rRNA gene from clone QEDN7CC06
445	MF439847 Uncultured bacterium clone cafs673 16S ribosomal RNA gene, partial sequence
445	LC212048 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: D288
445	JX505369 Uncultured Clostridiaceae bacterium clone Pad-122 16S ribosomal RNA gene, partial sequence
445	LR640750 uncultured bacterium partial 16S rRNA gene
445	KJ023570 Uncultured Candidatus Kuenenia sp. clone R1-4 16S ribosomal RNA gene, partial sequence
445	KX780748 Uncultured bacterium clone CA31 16S ribosomal RNA gene, partial sequence
445	HM769665 Acidobacteriaceae bacterium enrichment culture clone ANA-RAS-33 16S ribosomal RNA gene, par
445	MN157667 Uncultured bacterium clone A1112 16S ribosomal RNA gene, partial sequence
445	AY957928 Uncultured bacterium clone B3NR69D13 16S ribosomal RNA gene, partial sequence
445	LR652856 uncultured bacterium partial 16S rRNA gene
445	KX629305 Uncultured bacterium clone 16S(V3-V4)-6738 16S ribosomal RNA gene, partial sequence
445	MF643469 Uncultured bacterium clone E3C9_77196 16S ribosomal RNA gene, partial sequence
445	HQ911296 Uncultured bacterium clone AB_69 16S ribosomal RNA gene, partial sequence
445	GU912571 Uncultured bacterium clone F5K2Q4C04IN7Q5 16S ribosomal RNA gene, partial sequence
445	KF102038 Uncultured bacterium clone ncm62e02c1 16S ribosomal RNA gene, partial sequence
445	KX986826 Uncultured Sphingobium sp. clone W3-10 16S ribosomal RNA gene, partial sequence
445	LR635304 uncultured bacterium partial 16S rRNA gene

Results provided by: BLAST nt database

BLAST nt - Assembly Identification - continued

Nucleotide Representa- tion	Description
445	AB205806 Uncultured bacterium gene for 16S rRNA, partial sequence, clone:12C-A68
445	LR653550 uncultured bacterium partial 16S rRNA gene
445	MN157466 Uncultured bacterium clone A911 16S ribosomal RNA gene, partial sequence
445	KF785713 Uncultured bacterium clone NS_343 16S ribosomal RNA gene, partial sequence
445	JX221925 Uncultured bacterium clone EMIRGE_OTU_s1t2b_2957 16S ribosomal RNA gene, partial sequenc
445	JQ937039 Uncultured bacterium clone CA13 16S ribosomal RNA gene, partial sequence
445	JQ379782 Uncultured bacterium clone FL5Ae1_9844 16S ribosomal RNA gene, partial sequence
445	MG802557 Uncultured Rhodospirillaceae bacterium clone 3d_76639 16S ribosomal RNA gene, partial sequ
445	FJ793164 Uncultured bacterium clone TDB31 16S ribosomal RNA gene, partial sequence
445	KY077145 Lacibacterium aquatile strain HYN0012 16S ribosomal RNA gene, partial sequence
445	HM486267 Uncultured candidate division OD1 bacterium clone Jab PL2W2C7 16S ribosomal RNA gene, parti
445	HQ682040 Uncultured bacterium clone ZBAF2-82 16S ribosomal RNA gene, partial sequence
445	JQ376881 Uncultured bacterium clone FL11d11_20858 16S ribosomal RNA gene, partial sequence
445	KX973155 Uncultured bacterium clone OTU_5689 16S ribosomal RNA gene, partial sequence
445	KY049396 Uncultured bacterium clone OTU943 16S ribosomal RNA gene, partial sequence
445	HQ852948 Uncultured bacterium clone A4 16S ribosomal RNA gene, partial sequence
445	JQ386604 Uncultured bacterium clone W201g2_837 16S ribosomal RNA gene, partial sequence
445	JQ380930 Uncultured bacterium clone NC1F3d1_1552 16S ribosomal RNA gene, partial sequence
445	MG802231 Uncultured Bryobacterales bacterium clone 1b_29399 16S ribosomal RNA gene, partial sequenc
445	KX975339 Uncultured bacterium clone OTU_8006 16S ribosomal RNA gene, partial sequence
445	HF586940 Uncultured bacterium partial 16S rRNA gene, clone mBrB_56384
445	KX851985 Uncultured bacterium clone IPAS2 16S ribosomal RNA gene, partial sequence
445	JQ923543 Uncultured bacterium clone 5-77 16S ribosomal RNA gene, partial sequence
445	LN715294 Uncultured bacterium partial 16S rRNA gene, clone A16C01
445	EU669646 Uncultured bacterium clone S8-52 16S ribosomal RNA gene, partial sequence
445	LN563623 Uncultured bacterium partial 16S rRNA gene, clone SINZ1338_N11D4_16S_B
445	AF507683 Uncultured soil bacterium clone S0212 16S ribosomal RNA gene, partial sequence
445	KJ782860 Uncultured bacterium clone Wu-B19 16S ribosomal RNA gene, partial sequence
445	LN716081 Uncultured bacterium partial 16S rRNA gene, clone A23H07
445	KF680676 Uncultured prokaryote clone OTU012 16S ribosomal RNA gene, partial sequence
445	EF034922 Uncultured bacterium clone anNSC07 16S ribosomal RNA gene, partial sequence
445	KM200023 Uncultured Micavibrio sp. clone RBCd49 16S ribosomal RNA gene, partial sequence
445	JX099931 Uncultured bacterium clone HLLCs144 16S ribosomal RNA gene, partial sequence
445	KF145317 Uncultured bacterium clone S1P2063 16S ribosomal RNA gene, partial sequence
445	KX968105 Uncultured bacterium clone OTU_405 16S ribosomal RNA gene, partial sequence
445	JF341425 Uncultured bacterium clone 35MIC058 16S ribosomal RNA gene, partial sequence
445	NR_152683 Wukongibacter baidiensis strain DY30321 16S ribosomal RNA, partial sequence
445	KY691952 Uncultured bacterium clone 1554 16S ribosomal RNA gene, partial sequence
445	LR645554 uncultured bacterium partial 16S rRNA gene
445	JF420808 Uncultured bacterium clone gs202 16S ribosomal RNA gene, partial sequence
445	JF340692 Uncultured bacterium clone 04MIC085 16S ribosomal RNA gene, partial sequence
445	LR644570 uncultured bacterium partial 16S rRNA gene
445	HM534240 Uncultured alpha proteobacterium clone Hb_42(30) 16S ribosomal RNA gene, partial sequence
445	MW083488 Uncultured bacterium clone Otu0775 16S ribosomal RNA gene, partial sequence
445	FJ466229 Uncultured bacterium clone C126 16S ribosomal RNA gene, partial sequence
445	GU302428 Uncultured bacterium clone MatB0bac46 16S ribosomal RNA, partial sequence
445	LR654637 uncultured bacterium partial 16S rRNA gene
445	LR639809 uncultured bacterium partial 16S rRNA gene
445	CU925060 Unclassified bacterium 16S rRNA gene from clone QEDN1BC01
445	NG_051047 Homo sapiens unc-51 like kinase 4 (ULK4), RefSeqGene on chromosome 3
444	JN713458 GN02 bacterium canine oral taxon 291 clone ZR106 16S ribosomal RNA gene, partial sequence
444	OP276375 Uncultured bacterium clone 16739 16S ribosomal RNA gene, partial sequence
444	KX629590 Uncultured bacterium clone 16S(V3-V4)-7054 16S ribosomal RNA gene, partial sequence
444	CU922668 Uncultured Unclassified bacterium 16S rRNA gene from clone QEDR2DF05

Results provided by: BLAST nt database

BLAST nt - Assembly Identification - continued

Nucleotide Representa- tion	Description
444	MF010892 Uncultured bacterium clone 06472 16S ribosomal RNA gene, partial sequence
444	MN157513 Uncultured bacterium clone A958 16S ribosomal RNA gene, partial sequence
444	OM181615 Uncultured Clostridium sp. clone OTU_104 16S ribosomal RNA gene, partial sequence
444	JQ385539 Uncultured bacterium clone MD06a7_1615 16S ribosomal RNA gene, partial sequence
444	KC432026 Uncultured bacterium clone SEAA1AB021 16S ribosomal RNA gene, partial sequence
444	LR639091 uncultured bacterium partial 16S rRNA gene
444	JF189806 Uncultured bacterium clone ncd2177c08c1 16S ribosomal RNA gene, partial sequence
443	OW569396 Tetramitus jugosus genome assembly, organelle: mitochondrion
443	AL022393 Human DNA sequence from clone p373c6 on chromosome 6p21.31-21.33, complete sequence
443	HE614733 Uncultured alpha proteobacterium partial 16S rRNA gene, clone B03L-2
443	MH466694 Uncultured bacterium clone OTU1059 16S ribosomal RNA gene, partial sequence
443	GU914400 Uncultured bacterium clone F5K2Q4C04IIPUO 16S ribosomal RNA gene, partial sequence
443	GU920347 Uncultured eukaryote clone F5K2Q4C04IJL16 18S ribosomal RNA gene, partial sequence
443	EU104071 Uncultured bacterium clone M0111_74 16S ribosomal RNA gene, partial sequence
442	KU578548 Uncultured bacterium clone E133_H04 16S ribosomal RNA gene, partial sequence
441	LT844423 Uncultured euryarchaeote partial 16S rRNA gene, isolate ARC_OTU_260
441	CP009056 Frischella perrara strain PEB0191, complete genome
441	CP097268 Acidovorax sp. NCPPB 2350 chromosome, complete genome
440	GU913666 Uncultured bacterium clone F5K2Q4C04IRWR8 16S ribosomal RNA gene, partial sequence
440	HQ404320 Uncultured archaeon clone LJ9_2 16S ribosomal RNA gene, partial sequence
440	JF984311 Uncultured bacterium clone Upland_300_3607 16S ribosomal RNA gene, partial sequence
440	KC329589 Uncultured bacterium clone DM1-11 16S ribosomal RNA gene, partial sequence
440	EU298797 Uncultured bacterium clone GASP-KB3W1_C03 16S ribosomal RNA gene, partial sequence
440	AB179669 Uncultured bacterium gene for 16S rRNA, partial sequence, clone: KNA6-NB13
440	AP020332 Salmonella enterica SESen3709 DNA, complete genome
439	MF452880 Uncultured bacterium clone OTU3160 16S ribosomal RNA gene, partial sequence
439	OP113788 Bacillus cereus strain EBU12 16S ribosomal RNA gene, partial sequence
439	MH525094 Uncultured bacterium clone OTU_1446 16S ribosomal RNA gene, partial sequence
439	CP004143 Pseudomonas denitrificans ATCC 13867, complete genome
438	AB754086 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: rS35m_9
438	HQ640595 Uncultured bacterium clone B128 16S ribosomal RNA gene, partial sequence
438	OP276426 Uncultured bacterium clone 17357 16S ribosomal RNA gene, partial sequence
438	CP065016 Candidatus Saccharibacteria bacterium isolate Vibo_18-Q3-R45-57_BAT3C.117_fly chromosome
438	CP017748 Cupriavidus sp. USMAA2-4 isolate pure chromosome 1, complete sequence
438	AC277962 Homo sapiens chromosome 10 clone CH17-239L14, complete sequence
436	CP039393 Muribaculum gordoncarteri strain TLL-A4 chromosome
436	LC662912 Bacterium ARSSAG-00001547 DNA, putative prophage region, clone: 00001547_pp1
436	LN541670 Uncultured bacterium partial 16S rRNA gene, isolate Mineral.top.2.1.6_20067
436	AB902612 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: KID28_P3_H08
434	MK527613 Uncultured archaeon clone LRPA_109f_60 16S ribosomal RNA gene, partial sequence
434	CP087135 Flavobacterium sp. F-340 chromosome, complete genome
433	CP096135 MAG: Sphingobacteriales bacterium JAD_PAG50586_3 chromosome, complete genome
433	CP048106 Pontibacter pudoricolor strain BT214 chromosome, complete genome
433	CP100559 Gallus gallus breed Huxu chromosome 5
433	AP021861 Lacipirellula parvula PX69 DNA, complete genome
433	CP033686 Pseudomonas aeruginosa strain H25883 chromosome, complete genome
432	JN087906 Uncultured bacterium clone NIT_60 16S ribosomal RNA gene, partial sequence
432	HM065822 Uncultured archaeon clone 7-a19 16S ribosomal RNA gene, partial sequence
432	GU257184 Uncultured euryarchaeote clone OTRo_O1_23 16S ribosomal RNA gene, partial sequence
432	CP000250 Rhodopseudomonas palustris HaA2, complete genome
431	EF014558 Uncultured archaeon clone CaS1s.28 16S ribosomal RNA gene, partial sequence
430	KJ644803 Uncultured archaeon clone REG1522 16S ribosomal RNA gene, partial sequence
430	LT844447 uncultured euryarchaeote partial 16S rRNA gene, isolate ARC_OTU_124
430	MH532212 Uncultured bacterium clone OTU_8564 16S ribosomal RNA gene, partial sequence

Results provided by: BLAST nt database

BLAST nt - Assembly Identification - continued

Nucleotide Representa- tion	Description
430	CP070831 MAG: Candidatus Lokiarchaeota archaeon isolate bin108 chromosome
430	LR989944 Pieris brassicae genome assembly, chromosome: 12
430	AB366595 Uncultured archaeon gene for 16S rRNA, partial sequence, clone: KAB187-14
429	GU134463 Uncultured archaeon clone ArSD12 16S ribosomal RNA gene, partial sequence
429	JF262351 Uncultured euryarchaeote clone YLA063 16S ribosomal RNA gene, partial sequence
429	CP054675 Ignavibacteria bacterium isolate Ch128a chromosome, complete genome
429	LT844296 Uncultured Methanosaeta sp. partial 16S rRNA gene, isolate ARC_OTU_4
429	KC682096 Uncultured archaeon clone 11H_P2 16S ribosomal RNA gene, partial sequence
429	KU554962 Uncultured Methanothermobacter sp. clone XDZ3IFARC52 16S ribosomal RNA gene, partial sequen
429	JN810776 Uncultured archaeon clone Wg37_C11 16S ribosomal RNA gene, partial sequence
429	JF500603 Uncultured archaeon clone RI-RM-N167 16S ribosomal RNA gene, partial sequence
424	MG801145 Uncultured bacterium clone 2a_95682 16S ribosomal RNA gene, partial sequence
415	LR638218 uncultured bacterium partial 16S rRNA gene
406	MK981143 Uncultured beta proteobacterium clone read62142 16S ribosomal RNA gene, partial sequence
395	CP054901 Salmonella enterica strain FDAARGOS_718 chromosome
389	MF967845 Uncultured bacterium clone OTU245_LOL1.19763 16S ribosomal RNA gene, partial sequence
377	MW083456 Uncultured bacterium clone Otu0733 16S ribosomal RNA gene, partial sequence
368	MK981146 Uncultured beta proteobacterium clone read62209 16S ribosomal RNA gene, partial sequence
360	KP098619 Uncultured bacterium clone hkie9 16S ribosomal RNA gene, partial sequence
359	LR635764 uncultured bacterium partial 16S rRNA gene
353	KP938396 Uncultured Planctomycetales bacterium clone G5An21 16S ribosomal RNA gene, partial sequence
348	MG016315 Uncultured bacterium clone 290 16S ribosomal RNA gene, partial sequence
340	KP359759 Uncultured bacterium clone MISEQ01_89_000000000-A647M_1_2104_19838_10132 16S ribosoma
332	MH890275 Uncultured bacterium clone OTU1155_RD_1.21024 16S ribosomal RNA gene, partial sequence
329	KX498990 Uncultured bacterium clone 4A-10 16S ribosomal RNA gene, partial sequence
319	MK979412 Uncultured beta proteobacterium clone read409 16S ribosomal RNA gene, partial sequence
319	CP054827 Salmonella enterica subsp. enterica serovar Adjame strain 389598 chromosome, complete genom
319	KF424939 Uncultured bacterium clone IIW_G10 16S ribosomal RNA gene, partial sequence
309	MN156677 Uncultured bacterium clone A122 16S ribosomal RNA gene, partial sequence
304	MG016138 Uncultured bacterium clone 113 16S ribosomal RNA gene, partial sequence
300	CP039585 Salmonella enterica subsp. enterica serovar 1,4,[5],12:i:- strain PNCS014859 chromosome, co
289	GU454938 Uncultured bacterium clone ambient_uncontrolled-77 16S ribosomal RNA gene, partial sequenc
285	LR637422 uncultured bacterium partial 16S rRNA gene
285	MF968677 Uncultured bacterium clone OTU1133_DOM1.13497 16S ribosomal RNA gene, partial sequence
285	KF849427 Uncultured bacterium isolate DGGE gel band 12 16S ribosomal RNA gene, partial sequence
259	KY517964 Uncultured bacterium clone ELA_111314_OTU_2491 16S ribosomal RNA gene, partial sequence
255	MK803089 Uncultured bacterium clone Bin19 16S ribosomal RNA gene, partial sequence
253	JQ864318 Uncultured Nitrosomonas sp. isolate DGGE gel band 3 16S ribosomal RNA gene, partial sequenc
248	KP354416 Uncultured bacterium clone MISEQ01_89_000000000-A647M_1_1107_18192_10380 16S ribosoma
248	MK980262 Uncultured beta proteobacterium clone read29693 16S ribosomal RNA gene, partial sequence
244	GU916802 Uncultured bacterium clone F5K2Q4C04IR3D7 16S ribosomal RNA gene, partial sequence
244	GQ183191 Uncultured Syntrophorhabdus sp. clone 1.55 16S ribosomal RNA gene, partial sequence
241	LR646492 uncultured bacterium partial 16S rRNA gene
237	LC094953 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: AMX001DVQLJ
232	KX635930 Uncultured bacterium clone OTU2979 16S ribosomal RNA gene, partial sequence
230	KX973097 Uncultured bacterium clone OTU_5624 16S ribosomal RNA gene, partial sequence
226	KX020510 Uncultured Candidatus Brocadia sp. clone ANA20057 16S ribosomal RNA gene, partial sequence
225	CP053404 Salmonella enterica strain 2010K-2057 chromosome, complete genome
219	KT790744 Uncultured bacterium clone OTU7636 16S ribosomal RNA gene, partial sequence
216	MK979709 Uncultured beta proteobacterium clone read10535 16S ribosomal RNA gene, partial sequence
216	LC211251 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: E122
215	KF145353 Uncultured soil bacterium clone S1P3018 16S ribosomal RNA gene, partial sequence
215	GQ183381 Uncultured Azospira sp. clone 4.54 16S ribosomal RNA gene, partial sequence
214	KT122202 Uncultured Chloroflexi bacterium clone TGRWLFZ-16s-SSe292 16S ribosomal RNA gene, partial s

Results provided by: BLAST nt database

BLAST nt - Assembly Identification - continued

Nucleotide Representa- tion	Description
212	KY497890 Uncultured Anaerolineae bacterium clone Ga4-sred-OTU-125 16S ribosomal RNA gene, partial se
210	KP354133 Uncultured bacterium clone MISEQ01_89_000000000-A647M_1_2114_5313_14414 16S ribosomal
200	KP398407 Uncultured bacterium clone MISEQ01_89_000000000-A647M_1_2109_10676_16599 16S ribosoma
200	LC403564 Uncultured prokaryote 16S_OTU:3933 gene for 16S rRNA, partial sequence
195	MK980423 Uncultured beta proteobacterium clone read35326 16S ribosomal RNA gene, partial sequence
195	MK972231 Uncultured bacterium clone CB0413_75 16S ribosomal RNA gene, partial sequence
189	EF594057 Uncultured bacterium clone KIST-JJY025 16S ribosomal RNA gene, partial sequence
188	AB638624 Uncultured Chloroflexi bacterium gene for 16S rRNA, partial sequence, clone: HUY-H05
188	MF612808 Uncultured bacterium clone OTU616 16S ribosomal RNA gene, partial sequence
176	LR648477 uncultured bacterium partial 16S rRNA gene
171	KU108711 Uncultured bacterium clone 11760 16S ribosomal RNA gene, partial sequence
171	MH978885 Candidatus Brocadia carolinensis clone DO-48 16S ribosomal RNA gene, partial sequence
170	MG801107 Uncultured bacterium clone 3b_67503 16S ribosomal RNA gene, partial sequence
169	LC094867 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: AMX001AXIG2
168	CP055292 Shigella sonnei strain SE6-1 chromosome, complete genome
166	MK980002 Uncultured beta proteobacterium clone read20228 16S ribosomal RNA gene, partial sequence
162	MK980891 Uncultured beta proteobacterium clone read52972 16S ribosomal RNA gene, partial sequence
162	MK980059 Uncultured beta proteobacterium clone read21759 16S ribosomal RNA gene, partial sequence
162	KP390437 Uncultured bacterium clone MISEQ01_89_000000000-A647M_1_2119_5339_15842 16S ribosomal
162	MK981129 Uncultured beta proteobacterium clone read61570 16S ribosomal RNA gene, partial sequence
157	MT001029 Uncultured bacterium clone OTU34 16S ribosomal RNA gene, partial sequence
157	MT001061 Uncultured bacterium clone OTU66 16S ribosomal RNA gene, partial sequence
148	MT452754 Uncultured bacterium clone JGA19 16S ribosomal RNA gene, partial sequence
146	EU283570 Uncultured Chloroflexi bacterium clone A1836 16S ribosomal RNA gene, partial sequence
139	KT430027 Uncultured bacterium clone denovo1096 16S ribosomal RNA gene, partial sequence
139	MK980748 Uncultured beta proteobacterium clone read48108 16S ribosomal RNA gene, partial sequence
139	EU158808 Uncultured Nitrosomonas sp. clone LEO_03 16S ribosomal RNA gene, partial sequence
138	CP054236 Escherichia coli strain EcPF5 chromosome, complete genome
137	MK980060 Uncultured beta proteobacterium clone read21760 16S ribosomal RNA gene, partial sequence
136	LC094790 Uncultured bacterium gene for 16S ribosomal RNA, partial sequence, clone: AMX001AOJP1
134	MK980263 Uncultured beta proteobacterium clone read29694 16S ribosomal RNA gene, partial sequence
132	KY678516 Uncultured Candidatus Brocadia sp. clone 11 16S ribosomal RNA gene, partial sequence
131	LC662987 Gammaproteobacteria bacterium ARSSAG-00002384 DNA, putative prophage region, clone: 0000238
128	JQ918947 Uncultured Planctomycetales bacterium clone CS-12 16S ribosomal RNA gene, partial sequence
128	LC521611 Uncultured Microscillaceae bacterium OTU8 (E01) gene for 16S rRNA, partial sequence

Results provided by: BLAST nt database

Report Description

Input to create this report was either FASTA, or single/paired FASTQ/s.

If built from FASTA, contigs have been identified using Kraken2/Bracken; and assembly metrics, expected genome size compared against total assembly length, MLST, PlasmidFinder, AMRFinderPlus and BLAST results have been reported. In addition to these tests, if report was built from FASTQ/s, sequence technology, FASTQ metrics and coverage graph against the top BLAST hit was also reported. Finally, if Kraken2/Bracken top finding was Salmonella SeqSero2 and CRISPR SeroSeq additionally reported. See table below for summary of tests reported.

Expected results are approximately based on a 4,500,000 base bacterial genome.

When tests are run and there are no significant findings the test's banner and a "no results" message will still be included in this report. If this is not seen, yet test is expected, the report is invalid.

	FASTA	FASTQ	FASTQ Identified as Salmonella
Sequence Technology		X	X
FASTQ metrics		X	X
Kraken2/Bracken	X	X	X
Assembly metrics	X	X	X
Expected Genome Size	X	X	X
MLST	X	X	X
PlasmidFinder	X	X	X
AMRFinderPlus	X	X	X
Coverage Graph		X	X
BLAST	X	X	X
SeqSero2			X
CRISPR SeroSeq			X

Table 1: Test Summary

Sequence Technology

Single FASTQ is assumed to have been generated from Ion S5 System using S5 chemistry. Paired reads are assumed to have been generated from Illumina MiSeq System. Read length is reported based on average read length and rounded up to 50th number.

FASTQ metrics

Filename: Input files

File Size: Compressed input file size (.gz). *Expected: >150MB*

Q30 Passing: Percentage of reads with an average Phred score above 30. *Expected: >70%*

Mean Read Score: Average Phred score of all base calls. *Expected: >30*

Kraken2/Bracken

Bracken computes specie abundance using Kraken2 taxonomy labels. Fraction of reads are reported only when greater than 1% of total reads.

Kraken2 database was built from the following:

Libraries:

archaea: RefSeq complete archaeal genomes
 bacteria: RefSeq complete bacterial genomes
 plasmid: RefSeq plasmid nucleotide/protein sequences
 viral: RefSeq complete viral genomes
 human: GRCh38 human genome
 fungi: RefSeq complete fungal genomes
 plant: RefSeq complete plant genomes
 protozoa: RefSeq complete protozoan genomes
 UniVec Core: A subset of UniVec chosen to minimize false positive hits to the vector database

Custom genomes:

Bos taurus (cow)
 Sus scrofa (pig)
 gallus gallus (chicken)
 Odocoileus virginianus (white-tailed deer)
 Panthera tigris altaica (tiger)
 Felis catus (house cat)
 Canis lupus familiaris (dog)
 Loxodonta africana (elephant)
 Tursiops truncatus (bottlenose dolphin)
 Anas platyrhynchos (mallard)
 Cyprinus carpio (common carp)
 Nanorana parkeri (frog)
 Aedes albopictus (mosquito)

Unclassified reads were either poor quality or no perfect sample k-mers ($k=35$) mapped to read sequence from the Kraken2 database build.

Assembly metrics

Reads are assembled using SPAdes when FASTQs are used to generate report. When a FASTA is used SPAdes is assumed assembler.

Metrics can vary greatly. Numbers outside expected values should not always be interpreted as a poor sample, but should be considered against other test results.

Scaffolds: Total contig count of assembly. *Expected: <300*

Total Length: Total length of all sequences. *Expected: 4,500,000*

Longest Scaffold: Longest assembled sequence. *Expected: >200,000*

Scaffolds >1K nt: Sequences greater than 1,000 nucleotides in length. *Expected: >200*

N50: Half of the total assembled length is made from sequence greater than this value. *Expected: >100,000*

Mean Read Depth: Estimated average read depth across total assembly length. *Expected: >50X*

Genome Size Comparisons

Expected genome size is found using top Bracken identification. The genome size is estimated by providing the species name to NCBI which returns the expected size. If NCBI does not return a genome size for the top Bracken identification the Bracken list is iterated from highest to lowest read identification until genome size is found. If an expected genome size is still not found a value of 5,000,000 is used.

The comparison between sample assembly size and expected genome size is very important when determining contamination and genome completeness.

MLST

Assembly file scanned for PubMLST typing schemes using MLST tool.

Schema-Sequence type: Traditional PubMLST typing scheme found

MLST Detail: Gene and allele IDs, see link for explanations for "n", "~", "?", "-" and "n, m" notation.

PlasmidFinder

PlasmidFinder tool used to target plasmids.

Description: NCBI accession number and identification

Length: Sequence length of described accession

Contig ID: Assembly identification of found plasmid

HSP Length: High score pairs length of BLAST database sequence identifying plasmid

% Identity: Percentage of HSP bases similar to matched findings

% Coverage: Percentage of HSP bases aligning to matched findings

AMRFinderPlus

AMRFinderPlus finds acquired antimicrobial resistance genes in assembled nucleotide sequences and resistance-associated point mutations in select taxa. Gene classes found include AMR, point mutations, virulence factors, biocide, heat, acid, and metal resistance genes.

This report includes providing an organism option to AMRFinderPlus if Bracken identification fits select options. When an organism option is provided point mutations are screened and some common findings are suppressed.

AMRFinderPlus Organism Option: Option used to get organism-specific results

Contig ID: Assembly identification of found element

Element: Classification of the AMRFinderPlus gene

Gene: AMR gene

Name: Gene detail

% Cov: Percentage of protein aligning to matched findings

% Similar: Percentage of protein similar to matched findings

Coverage Graph

Reads aligned using BWA to the top BLAST accession hit. When greater than 100X depth-of-coverage log read depth is graphed. If less than 100X a linear read depth is graphed.

ID: NCBI accession aligned against

Average Depth: Average depth-of-coverage across sequence aligned against

Genome Length: Length of genome aligned against

Ambiguous SNPs: Ambiguous SNP count. A high count can indicate poor WGS (i.e. low coverage), a multiple-strain sample or contamination with a closely related strain.

ID Detail: Accession detail

BLAST

Assembly BLAST against nt database. Totaled nucleotide representation identified as top hit.

Nucleotide Representation: Summed contig lengths based on same accession top hit identifications.

Description: NCBI accession number and identification

SeqSero2

SeqSero2 targets the O (wzx and wzy genes) and H (fliC and fljB genes) antigens to determine serotype. When more than one O antigen, or two or more H antigens are found it can indicate the presence of contamination.

Predicted serotype(s): Predicted serotype based on O and H antigens

Predicted antigenic profiles: Shorthand profiles

Predicted subspecies: Predicted subspecies if available

Note: Special notes from SeqSero when provided

Bottom: Contig detail of SeqSero findings